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HEALTH AND SOCIAL SERVICE MANPOWER IN ALBERTA, 1986

Alberta
HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

9th Floor John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

FOREWORD

The Alberta Health and Social Services Disciplines Committee is an advisory body consisting of five government departments: Advanced Education; Career Development and Employment; Community and Occupational Health; Hospitals and Medical Care; and Social Services as well as the Professions and Occupations Bureau. The primary function of the Committee is to advise the provincial government on issues relating to health and social service manpower and training. To carry out this mandate, the Committee collects information and data through surveys and monitors manpower supply and demand through ongoing research activities.

Promoting the awareness of health and social service manpower concerns has always been the Committee's major priority . To accomplish this, the Committee makes its manpower information available and accessible to a number of institutions, organizations and the general public. Health and Social Service Manpower in Alberta, 1986, provides a range of information on 37 health and social service occupations in Alberta. The Committee is confident that the public will find it a useful manual.

On behalf of the Alberta Health and Social Disciplines Committee, I wish to thank the staff of the professional associations, licensing boards, post-secondary institutions, and employing agencies for providing valuable data to us. Their support and cooperation has made possible the publication of Health and Social Service Manpower in Alberta, 1986.

Elvin Christenson, F.C.A.
Chairman, Alberta Health and Social
Services Disciplines Committee

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INTRODUCTION

This is the ninth annual publication on health and social service manpower in Alberta. The Alberta Health and Social Services Disciplines Committee produces this report for the purpose of making manpower information available to the public. The report contains information and statistical data on 37 human service occupations for the year ending December 31, 1986. Included are: functional definitions, information on professional associations, licensing bodies, legislation, and educational programs, as well as data on practitioners by geographical location, historical and comparative manpower figures, enrolments in Alberta training programs and the number of graduates.

SCOPE OF COVERAGE

These are the thirty-seven human service occupations included in this report:

> audiologists/speech pathologists, biomedical engineers, child care workers, chiropractors, combined laboratory and x-ray technicians, community health representatives, dental assistants, dental hygienists, dental technicians, dentists, denturists, dietary technicians, dietitians/nutritionists, emergency medical technicians, health record administrators, health record technicians, medical laboratory technologists, medical radiation technologists, occupational hygiene technologists, occupational therapists, ophthalmic dispensers, optometrists, pharmacists, pharmacy assistants, physicians, physical therapists, podiatrists, prosthetists and orthotists, psychiatric nurses, psychologists, public health inspectors, recreational therapists, registered nurses, registered nursing assistants, rehabilitation practitioners, respiratory therapists, social workers.

The health care and social service sector contains numerous occupations; however, due to the constraint of time and other resources, it is not possible for all occupations to be reported in this publication. Two criteria have been used in the decision to include an occupation:

legislative recognition and the existence of training programs. Only occupations with professional legislation and/or formal training programs in Alberta (or inter-provincial training agreements) are included.

The information contained in this year's publication differs slightly from previous editions. First, a new chapter on community health representatives has been added. Second, a number of previously unregulated groups are now under the Health Disciplines Act. They are: emergency medical technicians-paramedic and ambulance, medical radiation technologists (radiographic technologists, radiation oncology technologists, and nuclear medicine technologists) and respiratory therapists (previously respiratory technologists). As a result of registration with the Health Disciplines Board, the source of information has changed from the survey of employers to the designated committee under the Board.

A third change relates to the geographic distribution of personnel in the report. As in previous editions, census divisions are used to indicate the distribution of personnel. However, as of 1986, the number of census divisions has increased from 15 to 19 . As a result, comparison of census division data between 1986 and preceding years is not possible. In conjunction with this change, the boundaries of the Census Metropolitan Areas of Calgary and Edmonton have increased to include a number of surrounding areas[1]. Manpower information for the two Census Metropolitan Areas is presented separately from their respective census divisions in order to provide a clearer picture of the urban and non-urban distribution of personnel. The map on the following page shows the census divisions and the major urban centres within each division.

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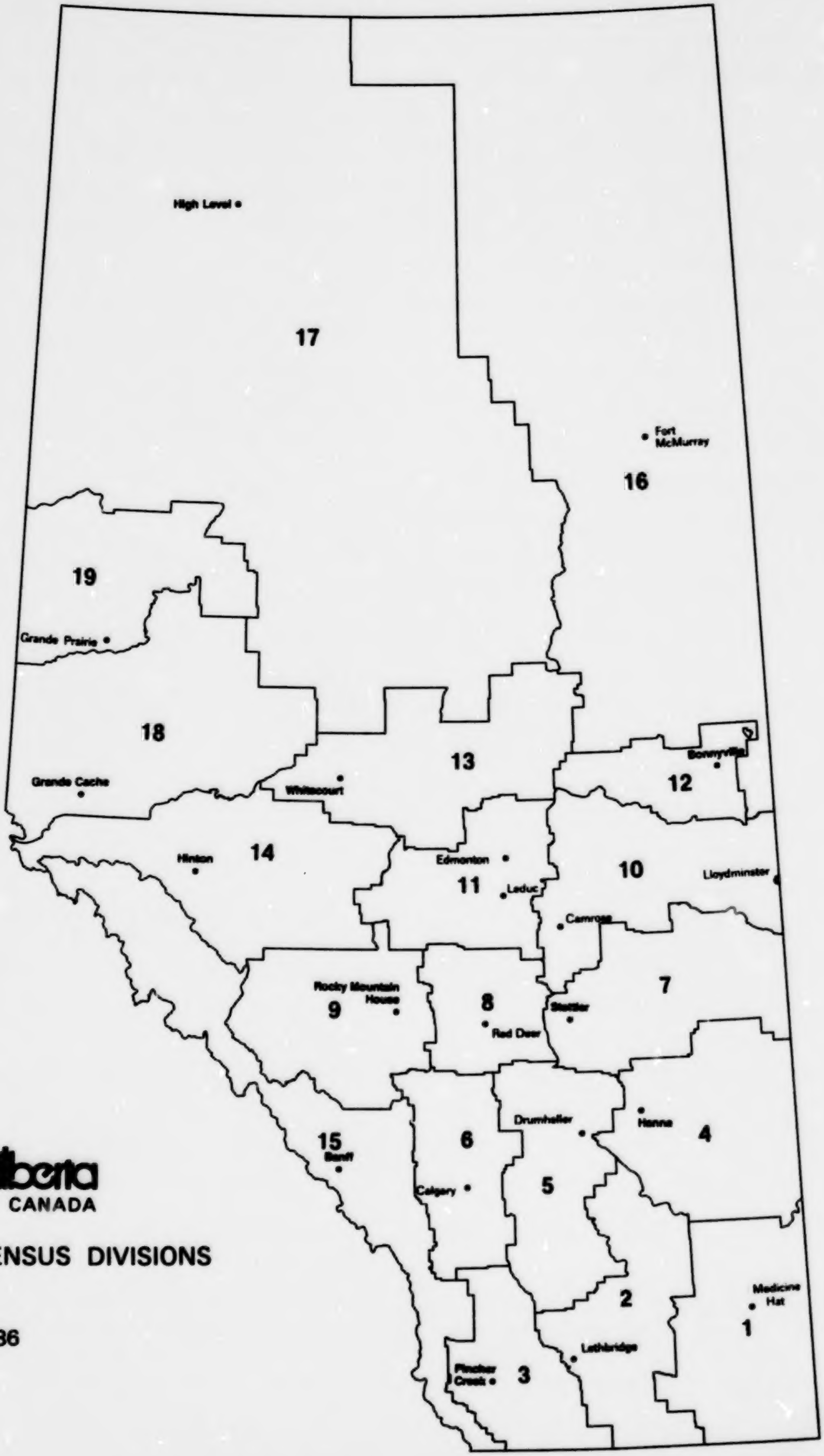
[1] The Census Metropolitan Area of Edmonton includes the cities of Edmonton, Fort Saskatchewan, Leduc, St. Albert, and Spruce Grove; the towns of Beaumont, Bon Accord, Calmar, Devon, Drayton Valley, Gibbons, Morinville, Red Water, and Stony Plain; the villages of Breton, Entwistle, Legal, New Sarepta, Thorbsy, Wabamun, and Warburg; the municipal district of Sturgeon #90, and the counties of Leduc #25, Parkland #31 and Strathcona #20. The Census Metropolitan Area of Calgary includes the cities of Airdrie and Calgary, the towns of Cochrane and Crossfield, the village of Beiseker and Irricana, the summer village of Chestermere Lake, the municipal district of Rocky View #44, and Sarcee Indian Reserve #145.


High Level
17
Fort McMurray
16
19
Grande Prairie
18
Grande Cache
Whitecourt
13
Bonnyville
12
Hinton
14
Edmonton
11
Leduc
10
Lloydminster
Camrose
7
Rocky Mountain House
9
8
Red Deer
Stettler
Drumheller
Hanna
4
15
Banff
6
Calgary
5
Medicine Hat
2
1
Lethbridge
Pincher Creek
3

Alberta
CANADA

CENSUS DIVISIONS

1986

INFORMATION SOURCES

The principal sources of information and data contained in this report are:

1. The 1980 edition of the **Canadian Classification and Dictionary of Occupations**;
2. Current occupational licensing legislation;
3. Provincial professional associations or licensing bodies for 37 health and social service occupational groups (two groups have no professional associations or licensing bodies);
4. Surveys of health and social service personnel working in Alberta conducted by the Alberta Health and Social Services Disciplines Committee;
5. Survey of health and social service education programs in Alberta conducted by Alberta Advanced Education;
6. Reports published and information provided by Health and Welfare Canada and other Western provinces; and
7. Population estimates and projections provided by the Alberta Bureau of Statistics, and municipal census data provided by Alberta Municipal Affairs and Statistics Canada.

The definitions in the **Canadian Classification and Dictionary of Occupations** have been used for most disciplines in this publication. In some cases, definitions were obtained from occupational licensing legislation or other sources. Information on legislation was obtained from current statutes governing the professions.

Most of the manpower data and information on continuing education appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. To obtain this information, a survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1986. The survey of employers of health and social service personnel conducted by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of data for occupational groups without legislated registration.

Alberta Health and Social Service Education Programs Inventory 1985-86 was the source of information on basic education programs contained in this publication. The inventory was compiled by Alberta Advanced Education through a survey of human services educational programs in Alberta's post-secondary institutions.

In order to put Alberta's manpower situation in national and regional contexts, provincial personnel-to-population ratios were compared to those for Canada and Western Canada where information from other jurisdictions was available. Health and Welfare Canada and provincial health departments of British Columbia, Manitoba, and Saskatchewan provided this information.

DATA LIMITATIONS

Accuracy is considered of utmost importance in data collection. However, there can be deficiencies in the source of information. Some of these limitations are:

1. Some professional association registries included members residing outside of Alberta. Where possible, out-of-province members were excluded for the purpose of this publication.

2. The number of practitioners is somewhat underestimated for those occupational groups where registration is not required in order to practice. For those groups where registration is not legislated, the survey of employers of health and social service personnel was used as an alternative source of data. Manpower statistics from the surveys of

employers indicate the number of personnel practising at the time of the survey. The registration data from professional association or registration bodies provides manpower data about the potential number of personnel in the province.

3. Table 2 in many of the following chapters includes personnel-to-population ratios for Alberta, Western Canada, and Canada. Caution must be used when comparing these ratios because various sources are used and assumptions are not uniform. The purpose is to provide comparisons with respect to current manpower status.

MANPOWER SITUATION IN 1986

Since 1979, the Alberta Health and Social Services Disciplines Committee has conducted manpower surveys of employers of health and social service personnel in Alberta. Thirteen surveys have been conducted since then, two annually from 1979 to 1983, and one in each year since 1983. The Committee's thirteenth employer survey was conducted on March 31, 1986. Data were collected on 81 occupational groups from nearly 4,400 employing agencies, with a response rate of 99.0 percent.

As of March 31, 1986, there were over 56,000 "full-time equivalent" established positions[2] for health and social service personnel in the employing agencies surveyed. At the time of the survey, there were over 1,700 vacant "full-time equivalent" positions, representing an average vacancy rate of 3.1 percent. There were over 6,700 resignations during the period from

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[2] This number does not necessarily reflect the number of persons actually employed. Two or more part-time personnel often fill one full-time position. In addition, the number of "full-time equivalent" positions also includes vacancies.

April 1, 1985 to March 31, 1986, representing an average turnover rate of 12.1 percent during the 12-month period prior to the survey.

As of March 31, 1986, the occupational groups experiencing the highest vacancy rates were:

- Occupational Therapists (17.5 %)
- Dental Hygienists (13.2 %)
- Physical Therapists (11.9%)
- Ultrasound Technologists (7.6 %)
- Recreational Therapy Aides (6.8 %)
- Respiratory Therapists/Technologists (6.6 %)
- Nuclear Medicine Technologists (6.5 %)
- Rehabilitation Practitioners (6.0 %)
- Pharmacists (5.6 %)
- Occupational Hygienists (5.4 %)

The manpower groups with the highest turnover rates from April 1, 1985 to March 31, 1986 were:

- Occupational Therapists (29.5 %)
- Nuclear Medicine Technologists (26.2 %)
- Alcoholism/Addiction Counsellors (25.6 %)
- Child Care Workers (25.3 %)
- Optometric Assistants (25.1 %)
- Rehabilitation Practitioners (22.8 %)
- Life Skills Coaches (22.7 %)
- Physical Therapists (21.8 %)
- Recreational Therapy Aides (17.8%)
- Homehelpers (17.4%).

TRAINING OF HEALTH AND SOCIAL SERVICE PERSONNEL

In 1985-86 Alberta had a total of 124 educational programs to prepare health and social service personnel. These training programs were found in 27 post-secondary educational institutions, hospitals, and cancer treatment centres in the province. In a few areas where there were no educational programs in the province, Alberta had interprovincial training agreements.

Alberta Advanced Education, on behalf of the Alberta Health and Social Services Disciplines Committee, publishes annually a report entitled **Alberta Health and Social Service Education Programs Inventory**. The 1985-86 edition of this publication contains the following information on health and social service training programs in Alberta:

- Location and length of training programs;
- Number of applicants;
- First-year enrolment quota;
- Actual enrolments; and
- Number of graduates.

Readers who wish to obtain more information in these areas should consult this publication.

FORMAT OF THE PUBLICATION

The format of this report remains the same as previous editions. The 37 occupational groups are organized alphabetically by chapter. Each chapter contains sections on:

1. The functional definition and statistical highlights of the occupational group;

2. Professional association, licensing authority, and regulatory legislation;

3. The number of personnel, their geographical distribution, and historical and comparative manpower data; and

4. Basic and continuing education programs.

There is a breakdown by speciality for three of the occupational groups: dentists, physicians, and registered nurses.

The table on page 10 provides summary information for the 37 occupational groups.

SUMMARY INFORMATION

	Number of Registered/ Practicing Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Audiologists and Speech Pathologists	330	1: 7,198		1	24
Biomedical Engineers	17	1:139,722		3	2
Child Care Workers	1,312	1: 1,810		3	62
Chiropractors	316	1: 7,517	X	-	-
Combined Laboratory and X-Ray Technicians	296	1: 8,025		1	18
Community Health Representatives	73	1: 32,538		1	14
Dental Assistants	1,983	1: 1,198	X	3	134
Dental Hygienists	601	1: 3,952	X	1	40
Dental Technicians	168	1: 14,139	X	1	11
Dentists	1,224	1: 1,941	X	1	44
Denturists	188	1: 12,634	X	1	12
Dietary Technicians	248	1: 9,578		2	45
Dietitians/ Nutritionists	366	1: 6,490	X	2	19
Emergency Medical Technicians	1,007	1: 2,359	X	4	228
Health Record Administrators	145	1: 16,381		1	16
Health Record Technicians	279	1: 8,514		1	12
Medical Laboratory Technologists	2,207	1: 1,076		3	117
Medical Radiation Technologists	1,089	1: 2,181	X	4	69
Occupational Hygiene Technologists	92	1: 25,818		1	5
Occupational Therapists	330	1: 7,198		1	45
Ophthalmic Dispensers	340	1: 6,986	X	1	-
Optometrists	211	1: 11,257	X	-	-
Pharmacists	1,913	1: 1,242	X	1	66
Pharmacy Assistants	394	1: 6,029		1	36
Physical Therapists	1,043	1: 2,277	X	2	48

SUMMARY INFORMATION (Continued)

	Number of Registered/ Practicing Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Physicians	3,906	1: 608	X	2	178
Podiatrists	19	1:125,015	X	-	-
Prosthetists and Orthotists	31	1: 76,622		-	-
Psychiatric Nurses	1,031	1: 2,304	X	2	56
Psychologists	1,097	1: 2,165	X	10	120
Public Health Inspectors	129	1: 18,413	X	-	-
Recreational Therapists	207	1: 11,475		1	22
Registered Nurses	21,596	1: 110	X	24	1,155
Registered Nursing Assistants	7,864	1: 302	X	3	282
Rehabilitation Practitioners	1,223	1: 1,942	X	6	153
Respiratory Therapists	397	1: 5,983	X	2	48
Social Workers	2,154	1: 1,103	X	6	369

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

I. OVERVIEW

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 298 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (S.H.A.A.) in 1986[1]. However, registration is not compulsory for audiologists and speech pathologists. According to a survey of health and social service employers, conducted by the Alberta Health and Social Services Disciplines Committee, there were 27 audiologists and 303 speech pathologists practicing in Alberta.[2]

Speech and hearing personnel practicing in the Census Metropolitan Areas of Calgary and Edmonton accounted for 72 percent of the total. The provincial audiologist-to-population ratio was 1:87,973 and the provincial speech pathologist-to-population ratio was 1:7,839 in 1986.

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[1] Source: Speech and Hearing Association of Alberta. Number of speech and hearing personnel registered with the S.H.A.A. as of October 31, 1986.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Speech and Hearing Association of Alberta
Box 86, Main Post Office
Edmonton, Alberta
T5J 2G9

President: Ms. Mary Lou Iceton

c) Legislation:

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING AUDIOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Centre)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,592	-
2 (Lethbridge)	0	115,739	-
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	0	12,376	-
5 (Drumheller)	1	38,805	1: 38,805
6 (Calgary excluding CMA)	0	98,279	-
7 (Stettler)	0	40,681	-
8 (Red Deer)	0	116,611	-
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	0	79,745	-
11 (Edmonton excluding CMA)	0	22,039	-
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	0	54,973	-
14 (Hinton)	0	25,309	-
15 (Banff)	1	22,794	1: 22,794
16 (Fort McMurray)	0	48,779	-
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	2	72,997	1: 36,499
Census Metropolitan Area of Calgary	10	671,326	1: 67,133
Census Metropolitan Area of Edmonton	13	785,465	1: 60,420
PROVINCIAL TOTAL	27	2,375,278	1: 87,973

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B GEOGRAPHIC DISTRIBUTION OF PRACTICING SPEECH PATHOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Centre)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	56,592	1: 7,074
2 (Lethbridge)	7	115,739	1: 16,534
3 (Pincher Creek)	4	35,970	1: 8,993
4 (Hanna)	2	12,376	1: 6,188
5 (Drumheller)	4	38,805	1: 9,701
6 (Calgary excluding CMA)	4	98,279	1: 24,570
7 (Stettler)	3	40,681	1: 13,560
8 (Red Deer)	10	116,611	1: 11,661
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	7	79,745	1: 11,392
11 (Edmonton excluding CMA)	12	22,039	1: 1,837
12 (Bonnyville)	4	43,907	1: 10,977
13 (Whitecourt)	4	54,973	1: 13,743
14 (Hinton)	2	25,309	1: 12,655
15 (Banff)	1	22,794	1: 22,794
16 (Fort McMurray)	4	48,779	1: 12,195
17 (High Level)	2	48,852	1: 24,426
18 (Grande Cache)	2	13,587	1: 6,794
19 (Grande Prairie)	8	72,997	1: 9,125
Census Metropolitan Area of Calgary	92	671,326	1: 7,297
Census Metropolitan Area of Edmonton	123	785,465	1: 6,386
PROVINCIAL TOTAL	303	2,375,278	1: 7,839

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 MANPOWER STATISTICS FOR AUDIOLOGISTS AND PATHOLOGISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	184[1]	325[2]	330[3]
% Change in Number of Practicing Personnel	N/A	N/A	1.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio: - Alberta	1:12,839	1: 7,298	1: 7,198

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1984 and 1985 figures is due mainly to the fact that the 1984 survey was not a comprehensive survey, and not all audiologists and speech pathologists in the province were counted in 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is a four year speech pathology and audiology baccalaureate program offered at the University of Alberta. The program produced 24 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 4 years)			
Enrolments: 1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	32	34	35
3rd Year	27	28	31
4th Year	20	24	24
Graduates:	19	24	24

[1] Source: **Alberta Health and Social Service Education Programs Inventory**, 1985-86. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

In addition to its annual three-day convention, the Continuing Education Committee of the Speech and Hearing Association of Alberta held a workshop and a number of seminars on relevant topics. The Glenrose Rehabilitation Hospital also offered workshops pertaining to speech-language disorders.

BIOMEDICAL ENGINEERS

I. OVERVIEW

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of biomedical engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: **Development in Biomedical Engineering in Canada - Manpower and Governmental Activities.** Ottawa, Ontario: Health Manpower Directorate, Department of National Health and Welfare, 1973; pp. 2-3)

There were 17 biomedical engineers who resided in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1986.[2] Biomedical engineers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 82 percent of the total. The provincial biomedical engineer-to-population ratio was 1:139,722 in 1986.

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[1] The term, "biomedical engineer," is often used much more loosely to cover physicists, computing scientists, and other specialists and technicians, working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this broader interpretation is used.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Building M-50, Room 164
Ottawa, Ontario
K1A 0R8

President: Dr. Walter Zingg

c) Legislation:

There is no legislation regulating biomedical engineers in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	56,592	-
2 (Lethbridge)	0	115,739	-
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	0	12,376	-
5 (Drumheller)	0	38,805	-
6 (Calgary excluding CMA)	0	98,279	-
7 (Stettler)	0	40,681	-
8 (Red Deer)	0	116,611	-
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	0	79,745	-
11 (Edmonton excluding CMA)	1	22,039	1: 22,039
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	0	54,973	-
14 (Hinton)	0	25,309	-
15 (Banff)	0	22,794	-
16 (Fort McMurray)	1	48,779	1: 48,779
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	1	72,997	1: 72,997
Census Metropolitan Area of Calgary	3	671,326	1:223,775
Census Metropolitan Area of Edmonton	11	785,465	1: 71,406
PROVINCIAL TOTAL	17	2,375,278	1:139,722

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1984, 1985, and 1986

	1984	1985	1986
Number of Registered Personnel[1]	23	19	17
% Change in Number of Registered Personnel	-17.8%	-17.4%	-10.5%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1:102,713	1:124,842	1:139,722

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. Master's and doctoral degree programs are available to students registered in the Department of Applied Sciences in Medicine and to students registered in engineering or science faculties and carrying out their research in the Faculty of Medicine. In 1985-86, eight students graduated from the master's program and two from the doctoral program.

TABLE 3

BASIC EDUCATION PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. MASTER'S PROGRAMS			
University of Alberta			
Master's of Science offered by the Faculties of Engineering and Science (Program Length: variable)			
Enrolments:	2	2	9
Graduates:	1	1	6
University of Alberta			
Master's of Science offered by the Department of Applied Sciences in Medicine (Program Length: variable)			
Enrolments:	4	4	5
Graduates:	1	0	2
PROVINCIAL TOTAL			
Number of M.Sc. Programs: 2			
Graduates	2	1	8
B. Ph.D. PROGRAM			
University of Alberta (Program Length: variable)			
Enrolments:	0	3	5
Graduates:	0	1	2

---

[1] Source: Department of Applied Sciences in Medicine and Department of Biomedical Engineering, Faculty of Electrical Engineering, University of Alberta.

b) Continuing Education Programs:

The Canadian Medical and Biological Engineering Society sponsored a number of continuing education courses. Organizations similar in nature to the Canadian Medical and Biological Engineering Society, offered continuing education courses during their respective conferences. These conferences were open to all members.

CHILD CARE WORKERS

I. OVERVIEW

Definition: Care for and counsel emotionally disturbed or mentally handicapped children and youths in residential treatment facility, in special school or social intervention program. Supervise daily activities and attend to needs of children and youth under care. Arrange and direct recreational activities. Counsel children and youths to help them deal with personal or behavioural problems. Enforce residential rules and take measures to control unruly behaviour. Assess and report problems and progress of children and youths. Confer with other staff members and refer difficult cases to health care professionals or social workers. Help to mediate between child and parents, if required. Provide individual guidance for youths in social intervention programs within community or assist in supervision of special school classes for emotionally disturbed children, if required. Prepare meals, clean and perform related housekeeping duties, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 1,312 child care workers practicing in Alberta in 1986.[1] Child care workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for two-thirds of the total. The provincial child care worker-to-population ratio was 1:1,810 in 1986. Since child care workers primarily work with children and adolescents, the adjusted provincial child care worker-to-population (5-17 years) ratio was 1:359 in 1986.[2]

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Child Care Workers' Association of Alberta
8815 - 99 Street
Edmonton, Alberta
T6E 3V3

President: Mr. Jeff Reid

c) Legislation:

There is no legislation regulating child care workers in Alberta at present.

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[2] Source: Population Estimates, Alberta, June 1986, Edmonton, Alberta: Alberta Bureau of Statistics, 1986.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING CHILD CARE WORKERS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	33	56,592	1: 1,715
2 (Lethbridge)	43	115,739	1: 2,692
3 (Pincher Creek)	20	35,970	1: 1,799
4 (Hanna)	0	12,376	-
5 (Drumheller)	26	38,805	1: 1,493
6 (Calgary excluding CMA)	21	98,279	1: 4,680
7 (Stettler)	7	40,681	1: 5,812
8 (Red Deer)	59	116,611	1: 1,976
9 (Rocky Mountain House)	3	15,999	1: 1,533
10 (Camrose)	18	79,745	1: 4,430
11 (Edmonton excluding CMA)	17	22,039	1: 1,296
12 (Bonnyville)	34	43,907	1: 1,291
13 (Whitecourt)	2	54,973	1:27,487
14 (Hinton)	6	25,309	1: 4,218
15 (Banff)	5	22,794	1: 4,559
16 (Fort McMurray)	69	48,779	1: 707
17 (High Level)	38	48,852	1: 1,286
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	26	72,997	1: 2,808
Census Metropolitan Area of Calgary	551	671,326	1: 1,218
Census Metropolitan Area of Edmonton	334	785,465	1: 2,352
PROVINCIAL TOTAL	1,312	2,375,278	1: 1,810

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF CHILD CARE WORKERS, ALBERTA, 1986

Community By Population Size	Number Practicing[1]	Population[2]	Personnel -to- Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	551	671,326	1: 1,218
Census Metropolitan Area of Edmonton	334	785,465	1: 2,352
Between 10,000 and 60,000			
Camrose	18	12,968	1: 720
Fort McMurray	48	34,949	1: 728
Grande Prairie	20	26,471	1: 1,324
Lethbridge	34	58,841	1: 1,730
Lloydminster	0	10,201	-
Medicine Hat	33	41,804	1: 1,267
Red Deer	39	54,425	1: 1,396
Wetaskiwin	13	10,071	1: 775
Between 5,000 and 10,000			
Bonnyville	0	5,470	-
Brooks	0	9,464	-
Crownest Pass	0	6,912	-
Drumheller	0	6,366	-
Edson	1	7,323	1: 7,323
High River	10	5,096	1: 510
Hinton	4	8,629	1: 2,157
Innisfail	10	5,535	1: 554
Lacombe	7	6,080	1: 869
Okotoks	0	5,214	-
Peace River	0	6,288	-
Ponoka	0	5,473	-
Rocky Mountain House	3	5,182	1: 1,727
Slave Lake	7	5,429	1: 776
St. Paul	6	5,030	1: 838
Stettler	0	5,147	-
Taber	0	6,382	-
Vegreville	0	5,276	-
Whitecourt	1	5,737	1: 5,737
Under 5,000	173	552,724	1: 3,195
TOTAL	1,312	2,375,278	1: 1,810

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

TABLE 2 MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	1,318[1]	1,358[2]	1,312[3]
% Change in Number of Practicing Personnel	N/A	3.0%	-3.4%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio: - Alberta	1:1,792	1:1,747	1:1,810

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: As of 1984, community youth workers are included as well.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986, Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Grant MacEwan Community College, Lethbridge Community College, and Mount Royal College each offer a two-year child care worker diploma program. The three programs produced 62 graduates in 1985-86.

TABLE 3

BASIC EDUCATION PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1983-84	1984-85	1985-86
DIPLOMA CHILD CARE PROGRAMS			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:[1]			
1st Year	67	74	83
2nd Year	55	40	48
Graduates:	30	23	33
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	-	21	28
2nd Year	-	-	16
Graduates:	-	-	12
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	31	24	36
2nd Year	30	21	20
Graduates:	28	16	17
PROVINCIAL TOTAL			
Number of Training Programs: 3			
Graduates:	58	39	62

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[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-1986.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Child Care Workers' Association of Alberta held its annual conference and a number of workshops in 1986. A number of organizations offered continuing education programs pertaining to child care.

CHIROPRACTORS

I. OVERVIEW

Definition: A chiropractor practises within the branch of the healing arts concerned with the restoration and maintenance of human health by the chiropractic adjustment or manipulation of the spinal column and other articulations of the body and includes the use of x-ray and other analytical instruments, therapies and diagnostic procedures.

(Source: The Chiropractic Profession Act, S.A. 1984, Ch. C9.1)

There were 316 chiropractors who resided in Alberta and registered with the Alberta Chiropractic Association (A.C.A.) in 1986.[1] Chiropractors located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 55 percent of the total. The number of chiropractors registered in Alberta increased by 5.7 percent between 1984 and 1986 while the provincial population grew by 0.5 percent during the same period. The provincial chiropractor-to-population ratio was 1: 7,517 in 1986.

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[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of May 31, 1986. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5J 3G1

b) Professional Association:

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5J 3G1

President: Dr. K.R. Harrison

c) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practice as chiropractors must register with the Alberta Chiropractic Association (A.C.A.). Annual re-registration with the Association is required of all chiropractors in order to continue to practice in Alberta.

The A.C.A. is responsible for registration, maintaining professional discipline and practice review. The Universities Coordinating Council has the authority to approve faculties of chiropractic and determine equivalencies for registration purposes.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED CHIROPRACTORS ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	56,592	1: 5,145
2 (Lethbridge)	22	115,739	1: 5,261
3 (Pincher Creek)	5	35,970	1: 7,194
4 (Hanna)	1	12,376	1:12,376
5 (Drumheller)	7	38,805	1: 5,544
6 (Calgary excluding CMA)	11	98,279	1: 8,934
7 (Stettler)	7	40,681	1: 5,812
8 (Red Deer)	23	116,611	1: 5,070
9 (Rocky Mountain House)	3	15,999	1: 5,333
10 (Camrose)	12	79,745	1: 6,645
11 (Edmonton excluding CMA)	13	22,039	1: 1,695
12 (Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	8	54,973	1: 6,872
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	3	22,794	1: 7,598
16 (Fort McMurray)	3	48,779	1:16,260
17 (High Level)	1	48,852	1:48,852
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	8	72,997	1: 9,125
Census Metropolitan Area of Calgary	93	671,326	1: 7,219
Census Metropolitan Area of Edmonton	80	785,465	1: 9,818
PROVINCIAL TOTAL	316	2,375,278	1: 7,516

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of June 30, 1986 Excludes inactive, honorary, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	299	297	316
% Change in Number of Registered Personnel	2.7%	-0.7%	6.4%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 7,901	1: 7,987	1: 7,516
- Western Canada[4]	-	1: 8,501	-

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association and residing in Alberta. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The only institution in Canada where chiropractic training can be obtained is at the Canadian Memorial Chiropractic College in Toronto, which offers a four-year program. Many of Alberta's chiropractors received their chiropractic training in the United States.

b) Continuing Education Programs:

The Alberta Chiropractic Association held educational seminars in 1986 dealing with relevant topics. The Canadian Chiropractic Association offered continuing education seminars at its annual convention. Continuing and post-graduate education programs were also offered by most colleges of chiropractic, and members are encouraged to upgrade their skills on an ongoing basis through any accredited teaching body.

COMBINED LABORATORY AND X-RAY TECHNICIANS

I. OVERVIEW

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant employing both a laboratory technologist and an x-ray technician.

(Source: **Saskatchewan Health Manpower Annual Report 1976**. Regina, Saskatchewan: Saskatchewan Health, 1976)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 296 combined laboratory and x-ray technicians practicing in Alberta in 1986.[1] The Census Metropolitan Areas of Calgary and Edmonton accounted for 29 percent of the total. The provincial personnel-to-population ratio was 1: 8,025 in 1986. In urban centers, services provided by combined laboratory and x-ray technicians are usually provided by medical laboratory technologists and medical radiation technologists (see chapters on Medical Laboratory Technologists and Medical Radiation Technologists).

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Certified Combined Technicians
P.O. Box 2575
Drayton Valley, Alberta
T0E 0M0

President: Ms. Colleen Sekura

c) Legislation:

In November 1984 the Legislative Assembly of Alberta designated the discipline of combined laboratory and x-ray technicians under the Health Disciplines Act. The Minister Responsible for Professions and Occupations established a committee for this discipline in August 1985. The committee is in the process of preparing draft regulations which will be presented to the Health Disciplines Board. When regulations are proclaimed, registration with the Board will become effective.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING COMBINED LABORATORY AND X-RAY TECHNICIANS ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	56,592	1: 28,296
2 (Lethbridge)	21	115,739	1: 5,511
3 (Pincher Creek)	5	35,970	1: 7,194
4 (Hanna)	8	12,376	1: 1,547
5 (Drumheller)	6	38,805	1: 6,468
6 (Calgary excluding CMA)	11	98,279	1: 8,934
7 (Stettler)	22	40,681	1: 1,849
8 (Red Deer)	23	116,611	1: 5,070
9 (Rocky Mountain House)	5	15,999	1: 3,200
10 (Camrose)	28	79,745	1: 2,848
11 (Edmonton excluding CMA)	17	22,039	1: 1,296
12 (Bonnyville)	14	43,907	1: 3,136
13 (Whitecourt)	14	54,973	1: 3,927
14 (Hinton)	4	25,309	1: 6,327
15 (Banff)	3	22,794	1: 7,598
16 (Fort McMurray)	1	48,779	1: 48,779
17 (High Level)	12	48,852	1: 4,071
18 (Grande Cache)	5	13,587	1: 2,717
19 (Grande Prairie)	9	72,997	1: 8,111
Census Metropolitan Area of Calgary	6	671,326	1:111,888
Census Metropolitan Area of Edmonton	80	785,465	1: 9,818
PROVINCIAL TOTAL	296	2,375,278	1: 8,025

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Statistics Canada, Census, June 1986.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	305[1]	349[2]	296[3]
% Change in Number of Practicing Personnel	27.6%	14.4%	-15.2%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: Alberta	1: 7,746	1: 6,797	1: 8,025

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a one-year combined laboratory and x-ray technology certificate program. The program produced 18 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 1 year)			
Enrolments:	37	51	20
Graduates:	25	26	18

[1] Source: **Alberta Health and Social Service Education Training Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Society of Certified Combined Technicians offered various continuing education courses related to relevant laboratory and x-ray technology topics. In addition, members were encouraged to take part in continuing education programs offered by other organizations and institutions, such as the Northern Alberta Institute Technology.

COMMUNITY HEALTH REPRESENTATIVES

I. OVERVIEW

Definition: Provide health education and advice primarily to native communities.

(Source: Survey of Health and Social Service Personnel Working in Alberta. Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, 1986).

Since registration with the Community Health Representative Association, is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 73 community health representatives practicing in Alberta in 1986[1]. Community health representatives in the Census Metropolitan Areas of Calgary and Edmonton accounted for 12 percent of the total. The provincial personnel-to-population ratio was 1:32,538 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta". Edmonton, Alberta: Alberta Health and Social Services Disiciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMAITON

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Community Health Representative Association
c/o Alberta Indian Health Care Commission
1390 First Edmonton Place
10665 Jasper Avenue
Edmonton, Alberta T5J 359

President: Ms. Betty Smith

c) Legislation:

None.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHICAL DISTRIBUTION OF COMMUNITY HEALTH REPRESENTATIVES, ALBERTA 1986.

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to Population Ratio
1 (Medicine Hat)	0	56,592	-
2 (Lethbridge)	0	115,739	-
3 (Pincher Creek)	4	35,970	1: 8,993
4 (Hanna)	0	12,376	-
5 (Drumheller)	4	38,805	1: 9,701
6 (Calgary excluding CMA)	0	98,279	-
7 (Stettler)	0	40,681	-
8 (Red Deer)	4	116,611	1: 29,153
9 (Rocky Mountain House)	3	15,999	1: 5,333
10 (Camrose)	3	79,745	1: 26,582
11 (Edmonton excluding CMA)	0	22,039	-
12 (Bonnyville)	10	43,907	1: 4,391
13 (Whitecourt)	1	54,973	1: 54,973
14 (Hinton)	0	25,309	-
15 (Banff)	0	22,794	-
16 (Fort McMurray)	19	48,779	1: 2,567
17 (High Level)	12	48,852	1: 4,071
18 (Grande Cache)	2	13,587	1: 6,794
19 (Grande Prairie)	2	72,997	1: 36,499
Census Metropolitan Area of Calgary	5	671,326	1:134,265
Census Metropolitan Area of Edmonton	4	785,465	1:196,366
PROVINCIAL TOTAL	73	2,375,278	1: 32,538

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta". Edmonton, Alberta: Alberta Health and Social Services Disiciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA, 1984, 1985 AND 1986

	1984[1]	1985	1986
Number of Practicing Personnel	N/A	93[2]	73[3]
% Change in Number of Practicing Personnel	N/A	N/A	-21.5%
Population (Alberta)	N/A	2,372,000[4]	2,375,278[5]
% Change in Population	N/A	0.4%	0.1%
Personnel-to-Population Ratios: Alberta	N/A	1:25,505	1:32,538

[1] The March 31, 1984 survey of health and social service personnel working in Alberta, was not a comprehensive survey, and not all community health representatives in the province were counted. Therefore, any comparison between 1984 and subsequent years would not be appropriate.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1936.

IV. EDUCATIONAL PROGRAMS

a) Basic Educational Programs:

The Alberta Vocational Centre in Lac La Biche offers a nine-month certificate program in community health work. The program produced 14 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA

	1983-84	1984-85	1985-86
Alberta Vocational Centre, Lac La Biche (Program Length: 9 months.)			
Enrolments:	17	34	21
Graduates:	14	26	14

---

[1] Source: **Alberta Health and Social Service Education Programs** Inventory, 1985-86. Edmonton, Alberta: Department of Advanced Education, December 1986.

DENTAL ASSISTANTS

I. OVERVIEW

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments, using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Dental Assistants Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

According to the survey, 1,983 dental assistants were practicing in the province in 1986.[1] Dental assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for two-thirds of the total. The provincial dental assistant-to-population ratio was 1:1,198 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Dental Assistants Association
(Certification Board Committee)
11914 - 86 Street
Edmonton, Alberta
T5B 3R2

b) Professional Association:

Alberta Dental Assistants Association
11914 - 86 Street
Edmonton, Alberta
T5B 3K2

President: Ms. Evelyn Roethlingshoefer

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dental hygienists, two dentists, and two dental assistants. The representatives were appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental assistants.

Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association.

Regulations giving the Alberta Dental Assistants Association the authority to register, license, and discipline dental assistants are in the draft stage.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING DENTAL ASSISTANTS ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	48	56,592	1:1,179
2 (Lethbridge)	103	115,739	1:1,124
3 (Pincher Creek)	20	35,970	1:1,799
4 (Hanna)	9	12,376	1:1,375
5 (Drumheller)	28	38,805	1:1,386
6 (Calgary excluding CMA)	36	98,279	1:2,730
7 (Stettler)	14	40,681	1:2,906
8 (Red Deer)	93	116,611	1:1,254
9 (Rocky Mountain House)	7	15,999	1:2,286
10 (Camrose)	54	79,745	1:1,477
11 (Edmonton excluding CMA)	70	22,039	1: 315
12 (Bonnyville)	40	43,907	1:1,098
13 (Whitecourt)	29	54,973	1:1,896
14 (Hinton)	14	25,309	1:1,808
15 (Banff)	14	22,794	1:1,628
16 (Fort McMurray)	34	48,779	1:1,435
17 (High Level)	18	48,852	1:2,714
18 (Grande Cache)	6	13,587	1:2,265
19 (Grande Prairie)	39	72,997	1:1,872
Census Metropolitan Area of Calgary	611	671,326	1:1,099
Census Metropolitan Area of Edmonton	696	785,465	1:1,129
PROVINCIAL TOTAL	1,983	2,375,278	1:1,198

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF DENTAL ASSISTANTS
ALBERTA, 1986

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	611	671,326	1: 1,099
Census Metropolitan Area of Edmonton	696	785,465	1: 1,129
Between 10,000 and 60,000			
Camrose	26	12,968	1: 499
Fort McMurray	32	34,949	1: 1,092
Grande Prairie	25	26,471	1: 1,059
Lethbridge	73	58,841	1: 806
Lloydminster	6	10,201	1: 1,700
Medicine Hat	48	41,804	1: 871
Red Deer	69	54,425	1: 789
Wetaskiwin	9	10,071	1: 1,119
Between 5,000 and 10,000			
Bonnyville	6	5,470	1: 912
Brooks	14	9,464	1: 676
Crownest Pass	6	6,912	1: 1,152
Drumheller	9	6,366	1: 707
Edson	5	7,323	1: 1,465
High River	8	5,096	1: 637
Hinton	9	8,629	1: 958
Innisfail	6	5,535	1: 923
Lacombe	6	6,080	1: 1,013
Okotoks	8	5,214	1: 652
Peace River	11	6,288	1: 572
Ponoka	7	5,473	1: 782
Rocky Mountain House	7	5,182	1: 740
Slave Lake	5	5,429	1: 1,086
St. Paul	10	5,030	1: 503
Stettler	7	5,147	1: 735
Taber	3	6,382	1: 2,127
Vegreville	6	5,276	1: 879
Whitecourt	7	5,737	1: 820
Under 5,000	248	552,724	1: 2,229
TOTAL	1,983	2,375,278	1: 1,198

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	1,786[1]	1,838[2]	1,983[3]
% Change in Number of Practicing Personnel	-0.5%	2.9%	7.9%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:1,323	1:1,291	1:1,198

[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985; and information collected for 1984 retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Discipines Committee.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Albeta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer 37-week dental assistant certificate training programs. The two programs produced 113 graduates in 1985-86. In addition, the Northern Alberta Institute of Technology offers a correspondence training program. This program, which is 24 months in length and is designed for dental assistants presently employed, had 196 students and 21 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 9½ months)			
Enrolments:	63	76	76
Graduates:	59	65	74
Southern Alberta Institute of Technology (Program Length: 37 weeks)			
Enrolments:	40	40	40
Graduates:	34	38	39
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	93	103	113

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Dental Assistants Association provided various continuing education seminars for members and non-members in 1986, as well as holding its annual convention.

Local Dental Societies and the Alberta Dental Hygienists Association organized seminars and workshops which were open to dental assistants. The University of Alberta also offered continuing education programs for dental assistants.

DENTAL HYGIENISTS

I. OVERVIEW

> Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings and remove sutures as permitted by training and by provincial legislation.[1]
>
> (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Since registration with the Alberta Dental Hygienists Association is not mandatory, the survey of health and social personnel working in Alberta conducted on March 31, 1986 by the Alberta Health and Social Services Discipline Committee, was used as an alternative source of manpower information.

According to the survey, 601 dental hygienists were practicing in the province in 1986.[2] Dental hygienists employed in the Census Metropolitan areas of Calgary and Edmonton accounted for 71 percent of the total. The provincial dental hygienist-to-population ratio was 1:3,952 in 1986.

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[1] Alberta legislation does not permit dental hygienists to engage in activities mentioned in the last sentence.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dental Hygienists Association
6 Pineridge Crescent
St. Albert, Alberta
T8N 4P2

President: Ms. Joni Strand

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dental hygienists, two dentists, and two dental assistants. The representatives were appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental hygienists.

In order to practice in the province, dental hygienists must be graduates of the Dental Hygiene program at the University of Alberta. If they are graduates from other training programs, they must be certified by the Universities Co-ordinating Council.

Although registration and licensure are not mandatory at present, regulations giving the Alberta Dental Hygienists Association the authority to register, license, and discipline dental hygienists are in draft stage.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING DENTAL HYGIENISTS
ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	56,592	1: 5,659
2 (Lethbridge)	16	115,739	1: 7,234
3 (Pincher Creek)	3	35,970	1:11,990
4 (Hanna)	4	12,376	1: 3,094
5 (Drumheller)	5	38,805	1: 7,761
6 (Calgary excluding CMA)	8	98,279	1:12,285
7 (Stettler)	2	40,681	1:20,341
8 (Red Deer)	32	116,611	1: 3,644
9 (Rocky Mountain House)	1	15,999	1:15,999
10 (Camrose)	20	79,745	1: 3,987
11 (Edmonton excluding CMA)	23	22,039	1: 958
12 (Bonnyville)	8	43,907	1: 5,488
13 (Whitecourt)	5	54,973	1:10,995
14 (Hinton)	5	25,309	1: 5,062
15 (Banff)	4	22,794	1: 5,699
16 (Fort McMurray)	14	48,779	1: 3,484
17 (High Level)	4	48,852	1:12,213
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	10	72,997	1: 7,300
Census Metropolitan Area of Calgary	205	671,326	1: 3,275
Census Metropolitan Area of Edmonton	222	785,465	1: 3,538
PROVINCIAL TOTAL	601	2,375,278	1: 3,952

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF DENTAL HYGIENISTS, ALBERTA, 1986

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	205	671,326	1: 3,275
Census Metropolitan Area of Edmonton	222	785,465	1: 3,538
Between 10,000 and 60,000			
Camrose	9	12,968	1: 1,441
Fort McMurray	12	34,949	1: 2,912
Grande Prairie	7	26,471	1: 3,782
Lethbridge	11	58,841	1: 5,349
Lloydminster	4	10,201	1: 2,550
Medicine Hat	10	41,804	1: 4,180
Red Deer	27	54,425	1: 2,016
Wetaskiwin	4	10,071	1: 2,518
Between 5,000 and 10,000			
Bonnyville	3	5,470	1: 1,823
Brooks	1	9,464	1: 9,464
Crownest Pass	0	6,912	-
Drumheller	4	6,366	1: 1,592
Edson	2	7,323	1: 3,662
High River	3	5,096	1: 1,669
Hinton	4	8,629	1: 2,157
Innisfail	0	5,535	-
Lacombe	3	6,080	1: 2,027
Okotoks	1	5,214	1: 5,214
Peace River	3	6,288	1: 2,096
Ponoka	1	5,473	1: 5,473
Rocky Mountain House	0	6,080	-
Slave Lake	0	5,214	-
St. Paul	2	5,030	1: 2,515
Stettler	1	5,147	1: 5,147
Taber	0	6,382	-
Vegreville	2	5,276	1: 2,638
Whitecourt	0	5,737	-
Under 5,000	60	552,724	1: 9,212
TOTAL	601	2,375,278	1: 3,952

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS
IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	562[1]	598[2]	601[3]
% Change in Number of Practicing Personnel	11.8%	6.4%	0.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 4,204	1: 3,967	1: 3,952
- Western Canada[6]	1: 4,974	1: 4,714	-

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[1] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1985; and information for 1984 collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

[6] Source: The 1983 and 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia. Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report**, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of employers conducted by the Alberta Health and Social Services Disciplines Committee.
The 1985 information is based on: (i) **Rollcall 85**, Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a two-year dental hygiene diploma program. The program produced 40 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	42	43	43
2nd Year	30	35	40
Graduates	30	35	40

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

Both the northern and southern components of the Alberta Dental Hygienists Association offered continuing education day courses in 1986. Both groups had speakers at their monthly meetings as well. Scientific speakers were also featured at the Alberta Dental Hygienists Association's annual convention.

The University of Alberta Faculty of Dentistry, Local Dental Societies, and the Alberta Dental Assistant's Association also offered a number of continuing education programs for dental hygienists.

DENTAL TECHNICIANS

I. OVERVIEW

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 168 dental technicians who resided in Alberta and registered with the Dental Technicians Board in 1986.[1] Dental technicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 86 percent of the total. Rural areas of the province have some of their dental laboratory work done through mail order by dental technicians in the major cities.

The provincial dental technician-to-population ratio was 1:14,139 in 1986. Some of the services performed by dental technicians, such as the making of complete dentures, can also be provided by denturists (see chapter on Denturists).

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 4, 1986. Number includes dental technicians who were also denturists.

II. II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Dr. T. Curry

b) Professional Association:

Alberta Society of Registered Dental Technicians
211, 11523 - 100 Avenue
Edmonton, Alberta
T5K 0S8

President: Mr. Gary Fedoretz

c) Legislation:

Under the authority of the Dental Technicians Act, all individuals who wish to practice as dental technicians must register with the Dental Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required for dental technicians in order to continue to practice in Alberta.

The Dental Technicians Board is responsible for regulating the conduct of dental technicians and for maintaining professional discipline. It also sets the educational qualifications required for registration.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	56,592	1: 28,296
2 (Lethbridge)	9	115,739	1: 12,860
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	0	12,376	-
5 (Drumheller)	0	38,805	-
6 (Calgary excluding CMA)	3	98,279	1: 32,760
7 (Stettler)	0	40,681	-
8 (Red Deer)	1	116,611	1:116,111
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	3	79,745	1: 26,582
11 (Edmonton excluding CMA)	2	22,039	1: 11,020
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	1	54,973	1: 54,973
14 (Hinton)	0	25,309	-
15 (Banff)	0	22,794	-
16 (Fort McMurray)	0	48,779	-
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	3	72,997	1: 24,332
Census Metropolitan Area of Calgary	54	671,326	1: 12,432
Census Metropolitan Area of Edmonton	88	785,465	1: 8,926
Regional Location Unknown	2		
PROVINCIAL TOTAL	168	2,375,278	1: 14,139

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 24, 1986. Number includes dental technicians who were also denturists.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	147	145	168
% Change in Number of Registered Personnel	-0.7%	-1.4%	15.9%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: Alberta	1:16,071	1:16,359	1:14,139

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, one of which is in Alberta, or a two-year dental technician diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The program produced 11 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	12	15	15
Graduates:	12	12	11

[1] Source: **Alberta Health and Social Service Education Programs Inventory 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Society of Registered Dental Technicians offered a number of continuing education programs for its members in 1986. The Northern Alberta Institute of Technology also offered some programs.

DENTISTS

I. OVERVIEW

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth including oral surgery.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,224 dentists who resided in Alberta and registered with the Alberta Dental Association (A.D.A.) in 1986.[1] Of these dentists, 88 percent were general practitioners and 12 percent were specialists. The number of dentists by speciality is shown in the table on page 79. About 71 percent of the dentists were graduates of the Faculty of Dentistry, University of Alberta, 21 percent were graduates of dental training programs in other Canadian provinces, and 8 percent were graduates of schools of dentistry in other countries.

Dentists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 71 percent of the total. The number of dentists registered in Alberta increased by 6.6 percent between 1984 and 1986 while the provincial population grew by 0.5 percent during the same period. The provincial dentist-to-population ratio was 1:1,941 in 1986.

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1986. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

b) Professional Association:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

President: Dr. J.D. Aitken

c) Legislation:

Under the authority of the Dental Profession Act, which was proclaimed on October 10, 1984, all individuals who wish to practice as dentists must register with the Alberta Dental Association (A.D.A.). Annual re-registration with the Association is required in order for dentists to continue to practice in Alberta.

The A.D.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Dental Profession Act sets the educational qualifications required for registration with the A.D.A. Post-basic educational qualifications required for registration as a dental specialist are set in the regulation. The Universities Coordinating Council is responsible for the certification of specialists. In addition, the Association has the authority to prescribe continuing education programs which must be completed by members in order to qualify for re-registration.

III. PERSONNEL DATA

TABLE 1A

GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	22	56,592	1:2,572
2 (Lethbridge)	51	115,739	1:2,269
3 (Pincher Creek)	13	35,970	1:2,767
4 (Hanna)	3	12,376	1:4,125
5 (Drumheller)	10	38,805	1:3,881
6 (Calgary-excluding CMA)	18	98,279	1:5,460
7 (Stettler)	13	40,681	1:3,129
8 (Red Deer)	57	116,611	1:2,046
9 (Rocky Mountain House)	4	15,999	1:4,000
10 (Camrose)	20	79,745	1:3,987
11 (Edmonton-excluding CMA)	31	22,039	1: 711
12 (Bonnyville)	21	43,907	1:2,091
13 (Whitecourt)	16	54,973	1:3,436
14 (Hinton)	9	25,309	1:2,812
15 (Banff)	11	22,794	1:2,072
16 (Fort McMurray)	14	48,779	1:3,484
17 (High Level)	9	48,852	1:5,428
18 (Grande Cache)	2	13,587	1:6,794
19 (Grande Prairie)	21	72,997	1:3,476
Census Metropolitan Area of Calgary	400	671,326	1:1,678
Census Metropolitan Area of Edmonton	475	785,465	1:1,654
PROVINCIAL TOTAL	1,224	2,375,278	1: 1,941

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1986. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF DENTISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	400	671,326	1: 1,678
Census Metropolitan Area of Edmonton	475	785,465	1: 1,654
Between 10,000 and 60,000			
Camrose	6	12,968	1: 2,161
Fort McMurray	12	34,949	1: 2,912
Grande Prairie	12	26,471	1: 2,206
Lethbridge	39	58,841	1: 1,509
Lloydminster	6	10,201	1: 1,700
Medicine Hat	21	41,804	1: 1,991
Red Deer	43	54,425	1: 1,266
Wetaskiwin	2	10,071	1: 5,036
Between 5,000 and 10,000			
Bonnyville	3	5,470	1: 1,823
Brooks	3	9,464	1: 3,155
Crowsnest Pass	0	6,912	-
Drumheller	3	6,366	1: 2,122
Edson	5	7,323	1: 1,465
High River	3	5,096	1: 1,699
Hinton	4	8,629	1: 2,157
Innisfail	5	5,535	1: 1,107
Lacombe	3	6,080	1: 2,027
Okotoks	3	5,214	1: 1,738
Peace River	4	6,288	1: 1,572
Ponoka	3	5,473	1: 1,824
Rocky Mountain House	4	5,182	1: 1,296
Slave Lake	3	5,429	1: 1,810
St. Paul	5	5,030	1: 1,006
Stettler	3	5,147	1: 1,716
Taber	3	6,382	1: 2,127
Vegreville	3	5,276	1: 1,759
Whitecourt	3	5,737	1: 1,912
Under 5,000	145	552,724	1: 4,318
TOTAL	1,224	2,375,278	1: 1,941

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1986. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A..

[2] Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	1,148	1,186	1,224
% Change in Number of Registered Personnel	0.9%	3.3%	3.2%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
Percent Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio:			
- Alberta	1:2,058	1:2,000	1:1,941
- Western Canada[3]	1:1,952	1:1,916	-

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1984, 1985, and 1986. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] Source: The 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report**, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to dentists registered with their respective provincial professional associations.
The 1985 information is based on: (i) **Rollcall 85**, Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year Doctor of Dental Surgery (D.D.S.) degree program. Two years of "pre-dentistry" university preparation is a pre-requisite for acceptance into the program. The program produced 44 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	51	52	50
2nd Year	53	47	46
3rd Year	44	47	46
4th Year	48	45	44
Graduates:	46	44	44

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[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Dental Association requires its members to participate in continuing education programs. The Continuing Education Department of the Faculty of Dentistry at the University of Alberta offered various dentistry courses.

Local Dental Societies presented courses on a regular basis. These courses covered a broad range of relevant topics. Continuing education programs were also offered by specialists' groups, study clubs, and professional continuing education seminar organizers.

TABLE 4

DENTISTS BY SPECIALTY, ALBERTA, 1986[1]

Specialty	Number of Dentists	Personnel-to-Population Ratio
Dental Public Health	3	1:791,759
Endodontics	15	1:158,352
Oral Pathology	4	1:593,820
Oral Radiology	3	1:791,759
Oral and Maxillofacial Surgery	19	1:125,015
Orthodontics	52	1: 45,678
Paedodontics	17	1:139,722
Periodontics	19	1:125,015
Prosthodontics	16	1:148,455
Specialty Total	148	1: 16,049
General Practice	1,076	1: 2,208
GRAND TOTAL	1,224	1: 1,941

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1986. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

DENTURISTS

I. OVERVIEW

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impression and mould of teeth, gums and jaws and design dentures. Direct other workers to construct dentures. Fit, adjust and repair dentures. Construct dentures, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 188 certified denturists (formerly known as certified dental mechanics) who resided in Alberta and registered with the Board of Examiners for Certified Dental Mechanics in 1986.[1] Denturists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 64 percent of the total. The number of denturists certified in Alberta increased by 8.7 percent between 1984 and 1986 while the provincial population grew by 0.5 percent during the same period. The provincial denturists-to-population ratio was 1:12,634 in 1986.

Some of the services performed by denturists, such as the making of complete dentures, are also provided by dental technicians. Similarly, some other functions of denturists, such as taking impressions for complete dentures, are also handled by dentists (see chapters on Dental Technicians and Dentists).

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of October 4, 1986. Number includes denturists who were also dental technicians.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Mr. Elmer Abele

b) Professional Association:

Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. David K. Kerslake

c) Legislation:

In December 1981, the Dental Mechanics Amendment Act was passed and assented to. This Act amended the Dental Mechanics Act by permitting dental mechanics to identify themselves as "denturists".

Under the authority of the Dental Mechanics Act, all individuals who wish to practice as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of denturists and for maintaining professional discipline. It is empowered to re-examine any denturist at any time and to suspend or cancel his certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTURISTS ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,592	1:11,318
2 (Lethbridge)	11	115,739	1:10,522
3 (Pincher Creek)	1	35,970	1:35,970
4 (Hanna)	0	12,376	-
5 (Drumheller)	4	38,805	1: 9,701
6 (Calgary excluding CMA)	1	98,279	1:98,279
7 (Stettler)	3	40,681	1:13,560
8 (Red Deer)	10	116,611	1:11,661
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	8	79,745	1: 9,968
11 (Edmonton excluding CMA)	7	22,039	1: 3,148
12 (Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	2	54,973	1:27,487
14 (Hinton)	2	25,309	1:12,655
15 (Banff)	1	22,794	1:22,794
16 (Fort McMurray)	2	48,779	1:24,390
17 (High Level)	1	48,852	1:48,852
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	4	72,997	1:18,249
Census Metropolitan Area of Calgary	46	671,326	1:14,594
Census Metropolitan Area of Edmonton	75	785,465	1:10,473
PROVINCIAL TOTAL	188	2,375,278	1:12,634

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[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta as of October 4, 1986. Number includes denturists who were also dental technicians.

[2] Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1983, 1984, AND 1985

	1984	1985	1986
Number of Registered Personnel[1]	173	180	188
% Change in Number of Registered Personnel	N/A	4.0%	4.4%
Population (Alberta)	2,362,400[3]	2,372,000[3]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:13,655	1:13,178	1:12,634
- Western Canada[4]	-	1:16,983	-

[1] Source: The Board of Examiners for Certified Dental Mechanics. Number of denturists registered with the Board and residing in Alberta. Note: The figures for 1984 and 1985 are different than those in the 1985 publication. The information in this edition is from the Board of Examiners, whereas, in the previous editions the information came from the Denturist Society of Alberta.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] Source: (i) Rollcall 85. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two routes that a person may take in order to become a denturist in Alberta. One is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners for Certified Dental Mechanics. The other is to enrol in a two-year training program offered by the Northern Alberta Institute of Technology. Upon completion of this program, the graduate is required to apprentice for two years under the supervision of a certified denturist. During this time the graduates are required to complete examinations at four levels. The program produced 12 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTURISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	19	18	18
Graduates:	12	13	12

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

A number of continuing education programs were offered by the Denturist Society of Alberta and the Northern Alberta Institute of Technology for denturists in 1986.

DIETARY TECHNICIANS

I. OVERVIEW

Definition: Assist in the planning and supervision of food service programs in governmental, institutional and commercial establishments. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 248 dietary technicians practicing in Alberta in 1986.[1] Dietary technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 58 percent of the total. The provincial dietary technician-to-population ratio was 1:9,578 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "D"
Edmonton, Alberta
T5L 4J8

or

Alberta Society of Dietary Technicians
P.O. Box 2353
Calgary, Alberta
T2P 2M6

President: Mrs. Heather Truber

c) Legislation:

There is no legislation regulating dietary technicians in Alberta a present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING DIETARY TECHNICIANS IN ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,592	1: 9,432
2 (Lethbridge)	14	115,739	1: 8,267
3 (Pincher Creek)	6	35,970	1: 5,995
4 (Hanna)	4	12,376	1: 3,094
5 (Drumheller)	4	38,805	1: 9,701
6 (Calgary excluding CMA)	1	98,279	1:98,279
7 (Stettler)	6	40,681	1: 6,780
8 (Red Deer)	17	116,611	1: 6,859
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	9	79,745	1: 8,861
11 (Edmonton excluding CMA)	5	22,039	1: 4,408
12 (Bonnyville)	6	43,907	1: 7,318
13 (Whitecourt)	9	54,973	1: 6,108
14 (Hinton)	1	25,309	1:25,309
15 (Banff)	0	22,794	-
16 (Fort McMurray)	5	48,779	1: 9,756
17 (High Level)	2	48,852	1:24,426
18 (Grande Cache)	2	13,587	1: 6,794
19 (Grande Prairie)	8	72,997	1: 9,125
Census Metropolitan Area of Calgary	62	671,326	1:10,828
Census Metropolitan Area of Edmonton	81	785,465	1: 9,697
PROVINCIAL TOTAL	248	2,375,278	1: 9,578

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	242[1]	248[2]	248[3]
% Change in Number of Practicing Personnel	-1.2%	2.5%	0.0%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 9,762	1: 9,565	1: 9,578

[1] Source: "September 30, 1984 Survey of Employers of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year program to train dietary technicians. The two programs together produced 45 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	26	25	25
2nd Year	29	25	25
Graduates:	26	23	22
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	35	37	42
2nd Year	25	20	28
Graduates:	24	17	23
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	50	40	45

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[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Society of Dietary Technicians held its annual general meeting and sponsored a number of seminars for dietary technicians. The Southern Alberta Institute of Technology offered a correspondence course to update dietary technicians. Continuing education programs were also provided monthly by the Alberta Registered Dietitians Association.

DIETITIANS/NUTRITIONISTS

I. OVERVIEW

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to the community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 366 dietitians/nutritionists who resided in Alberta and registered with the Alberta Registered Dietitians Association (A.R.D.A.) in 1986.[1] Registration with the A.R.D.A. is not mandatory in order to practice in the province. Not all registered dietitians/nutritionists practice in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 307 dietitians and nutritionists employed in health and social service agencies and institutions in 1986.[2]

Dietitians/Nutritionists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 78 percent of the total. The number of registered dietitians/nutritionists grew by 10.9 percent between 1984 and 1986, while the provincial population increased by 0.5 percent during the same period. The provincial registered dietitian/nutritionist-to-population ratio was 1:6,490 in 1986.

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1986.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

b) Professional Association:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

President: Ms. Kathy Clark

or

P.O. Box 2208, Station "M"
Calgary, Alberta
T2P 2M4

c) Legislation:

Although there is no mandatory registration requirement under the Registered Dietitians Act for dietitians/nutritionists to practise in the province, only dietitians/nutritionists who are registered with the Alberta Registered Dietitians Association (A.R.D.A.) may use the title of "Registered Dietitian."

The A.R.D.A. is responsible for regulating the conduct of its members and maintaining professional discipline. The Universities Coordinating Council sets the educational qualifications required for registration with the A.R.D.A. In addition, the Registered Dietitians Act stipulates educational and experiential qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,592	1: 9,432
2 (Lethbridge)	5	115,739	1:23,148
3 (Pincher Creek)	4	35,970	1: 8,993
4 (Hanna)	3	12,376	1: 4,125
5 (Drumheller)	3	38,805	1:12,935
6 (Calgary (excluding CMA)	4	98,279	1:24,570
7 (Stettler)	1	40,681	1:40,681
8 (Red Deer)	16	116,611	1: 7,288
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	10	79,745	1: 7,975
11 (Edmonton (excluding CMA)	11	22,039	1: 2,004
12 (Bonnyville)	5	43,907	1: 8,781
13 (Whitecourt)	3	54,973	1:18,324
14 (Hinton)	0	25,309	-
15 (Banff)	2	22,794	1:11,397
16 (Fort McMurray)	3	48,779	1:16,260
17 (High Level)	1	48,852	1:48,852
18 (Grande Cache)	1	13,587	1:13,587
19 (Grande Prairie)	4	72,997	1:18,249
Census Metropolitan Area of Calgary	133	671,326	1: 5,048
Census Metropolitan Area of Edmonton	151	785,465	1: 5,202
PROVINCIAL TOTAL	366	2,375,278	1: 6,490

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the Alberta Registered Dietitians Association and residing in Alberta as of April 30, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	339	366	366
% Change in Number of Registered Personnel	2.7%	8.0%	0.0%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 6,969	1: 6,481	1: 6,490

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1984, 1985, and 1986.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program with a major in foods and nutrition. The program produced 17 graduates in 1985-86. The University of Alberta also offers separate master's degree programs in both foods and nutrition. There were two graduates from these two programs in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. BACCALAUREATE PROGRAM:			
Home Economics: Foods and Nutrition			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	39	33	33
2nd Year	39	51	41
3rd Year	34	55	51
4th Year	32	33	50
Graduates	22	23	17
B. MASTER'S PROGRAM			
University of Alberta Master's of Science in Home Economics: Foods (Program Length: 2 years)			
Enrolments:	3	4	5
Graduates:	1	1	–

TABLE 3, CON'T

University of Alberta Master's of Science in Home Economics: Nutrition (Program Length: 2 years)			
Enrolments:	6	9	14
Graduates:	2	-	2
PROVINCIAL TOTAL			
Number of Master's Programs: 2			
Graduates:	3	1	2

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

A number of continuing education sessions were operated by the continuing education committee of the Alberta Registered Dietitians Association for dietitians/nutritionists. Other agencies and organizations which sponsored continuing education programs related to dietetics and nutrition were the Alberta Medical Association, the Alberta Hospitals Association, the Alberta Home Economics Association, and the Northern Alberta Institute of Technology.

EMERGENCY MEDICAL TECHNICIANS

I. OVERVIEW

Definition: An emergency attendant:

Gives emergency care to sick and injured persons at the scene of the accident or illness and during transport to the hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of ambulance driver if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Emergency medical technicians - ambulance (EMT-A) are ambulance attendants who have received training to provide emergency services at the basic life support level.[1] In Alberta, this means training at the EMT-A level provided at the Southern Alberta Institute of Technology or at the Alberta Vocational Centre at Lac La Biche.

Emergency medical technicians - paramedic (EMT-P) are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2]

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[1] "Basic life support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available." (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 7, Supplement; 1974: p. 84).

[2] According to the American Heart Association, advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion lifeline, employment of definitive therapy, including drug administration and stabilization of the patient's condition. (See: American Heart Association, "Standard for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 17, Supplement; 1974.)

In Alberta this means training at the EMT-P level provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

As of 1986, registration for emergency medical technicians - paramedic and ambulance is regulated under the Health Discipline Act. In previous years the number of persons employed was used as the indicator of manpower supply. Since these figures provide somewhat different information, 1986 data and data from previous years are not comparable.

There were 1,007 emergency medical technicians registered with the Emergency Medical Technicians (Paramedic and Ambulance) Committee in 1986. Emergency medical technicians in the Census Metropolitan Areas of Calgary and Edmonton accounted for 44 percent of the total. The provincial personnel-to-population ratio was 1:2,359.

In Alberta, municipalities have the power to set the level of ambulance services beyond the legislated minimum standard. Some municipalities have established ambulance services at the advanced life support level: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency paramedic personnel in Alberta.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Emergency Medical Technicians Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W5

b) Professional Association:

Registered Emergency Medical Technicians
Association of Alberta
18429 - 97A Avenue
Edmonton, Alberta
T5T 3L6

President: Mr. Guy L'Abbe

Registered Emergency Paramedics Association of Alberta
P.O. Box 6859, Postal Station "D"
Calgary, Alberta
T2P 2E9

President: Mr. Richard Osborne

c) Legislation:

There are two pieces of legislation which deal with ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A ambulance" in the province be staffed by at least one qualified attendant who at the minimum holds a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

In 1982, the Health Disciplines Board recommended to the Minister Responsible for Professions and Occupations that the discipline of emergency medical technicians - paramedic be designated under the

Health Disciplines Act. In 1984, the Board recommended to the Minister that the discipline of emergency medical technicians - ambulance be a designated health discipline. The Board also recommended that both emergency medical technicians - paramedic and emergency medical technicians - ambulance be regulated under the same health discipline committee. In November 1984, the designation of emergency medical technicians - paramedic was amended to emergency medical technicians so that both groups, EMT-P and EMT-A, could be regulated together. In December 1984, the Minister Responsible for Professions and Occupations established a committee known as the Emergency Medical Technicians Committee to develop regulations for the discipline.

In October 1985, the Lieutenant Governor in Council approved the regulations for the discipline of emergency medical technician under the Health Disciplines Act. The regulations came into effect on December 31, 1985.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	22	56,592	1:2,572
2 (Lethbridge)	75	115,739	1:1,543
3 (Pincher Creek)	17	35,970	1:2,116
4 (Hanna)	14	12,376	1: 884
5 (Drumheller)	18	38,805	1:2,156
6 (Calgary-excluding CMA)	28	98,279	1:3,510
7 (Stettler)	17	40,681	1:2,393
8 (Red Deer)	88	116,611	1:1,325
9 (Rocky Mountain House)	13	15,999	1:1,231
10 (Camrose)	30	79,745	1:2,658
11 (Edmonton-excluding CMA)	48	22,039	1: 459
12 (Bonnyville)	42	43,907	1:1,045
13 (Whitecourt)	22	54,973	1:2,499
14 (Hinton)	6	25,309	1:4,218
15 (Banff)	23	22,794	1: 991
16 (Fort McMurray)	20	48,779	1:2,439
17 (High Level)	8	48,852	1:6,107
18 (Grande Cache)	8	13,587	1:1,698
19 (Grande Prairie)	59	72,997	1:1,237
Census Metropolitan Area of Calgary	254	671,326	1:2,643
Census Metropolitan Area of Edmonton	187	785,465	1:4,200
PROVINCIAL TOTAL	1,007	2,375,278	1:2,359

[1] Source: Emergency Medical Technicians Committee (Paramedic & Ambulance)

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	254	671,326	1: 2,643
Census Metropolitan Area of Edmonton	187	785,465	1: 4,200
Between 10,000 and 60,000			
Camrose	9	12,968	1: 1,441
Fort McMurray	15	34,949	1: 2,330
Grande Prairie	19	26,471	1: 1,393
Lethbridge	60	58,841	1: 981
Lloydminster	2	10,201	1: 5,101
Medicine Hat	22	41,804	1: 1,900
Red Deer	53	54,425	1: 1,027
Wetaskiwin	1	10,071	1: 10,071
Between 5,000 and 10,000			
Bonnyville	18	5,470	1: 304
Brooks	6	9,464	1: 3,456
Crownest Pass	2	6,912	1: 1,061
Drumheller	6	6,366	1: 3,456
Edson	3	7,323	1: 2,441
High River	10	5,096	1: 510
Hinton	3	8,629	1: 2,876
Innisfail	13	5,535	1: 426
Lacombe	7	6,080	1: 869
Okotoks	3	5,214	1: 1,738
Peace River	4	6,288	1: 1,572
Ponoka	6	5,473	1: 912
Rocky Mountain House	5	5,182	1: 1,036
Slave Lake	1	5,429	1: 5,429
St. Paul	7	5,030	1: 719
Stettler	6	5,147	1: 858
Taber	0	6,382	-
Vegreville	5	5,276	1: 1,055
Whitecourt	2	5,737	1: 2,869
Under 5,000	278	552,724	1: 1,988
TOTAL	1,007	2,375,278	1: 2,359

1 Source: Emergency Medical Technicians Committee (Paramedics & Ambulance)

2 Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered or Practicing Personnel	902[1]	994[2]	1,007[3]
% Change in Number of Registered or Practicing Personnel	N/A	10.2%	N/A
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 2,619	1: 2,386	1: 2,359

[1] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: Emergency Medical Technicians Committee, Paramedic and Ambulance. Note: Since the source of information for 1986 is different from the source of previous years, the data for 1986 and previous years are not comparable.

[4] Source: "Alberta Census Divisions Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year diploma program in emergency medical technology - paramedic. The two programs produced 38 graduates in 1985-86. Alberta Vocational Centre Lac La Biche and the Southern Alberta Institute of Technology each offer a program (of varying lengths) in emergency medical technology - ambulance. The two programs produced 190 graduates in 1985 - 86.

TABLE 3A BASIC EDUCATION PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS (PARAMEDIC) IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	17	19	20
2nd Year	24	18	15
Graduates:	24	14	14
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	30	29	30
2nd Year	26	29	26
Graduates:	28	26	24
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	52	40	38

TABLE 3A CONT'D

BASIC EDUCATION PROGRAM FOR EMERGENCY MEDICAL TECHNICIANS (AMBULANCE) IN ALBERTA

	1983-84	1984-85	1985-86
Alberta Vocational Centre - Lac La Biche (Program Length: 189 hours)			
Enrolments:			
1st Year	190	184	145
Graduates:	176	148	121
Southern Alberta Institute of Technology (Program Length: 300 hours)			
Enrolments:			
1st Year	549	458	457
Graduates:	263	179	69
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	439	327	190

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

Continuing education programs are available through Red Deer College, the Southern Alberta Institute of Technology, the Northern Alberta Institute of Technology, Red Deer College, and Lakeland College, as well as from in-service training. In addition, the Registered Emergency Paramedic Association of Alberta and the Registered Emergency Medical Technician Ambulance Association provided educational opportunities.

HEALTH RECORD ADMINISTRATORS

I. OVERVIEW

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics, such as, reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 145 health record administrators practicing in Alberta in 1986.[1] Health record administrators employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for almost half of the total. The provincial health record administrator-to-population ratio was 1:16,381 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Mrs. Sonya Stasiuk

c) Legislation:

There is no legislation regulating health record administrators in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF HEALTH RECORD ADMINISTRATORS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	56,592	1:28,296
2 (Lethbridge)	7	115,739	1:16,534
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	1	12,376	1:12,376
5 (Drumheller)	4	38,805	1: 9,701
6 (Calgary excluding CMA)	2	98,279	1:49,140
7 (Stettler)	6	40,681	1: 6,780
8 (Red Deer)	6	116,611	1:19,435
9 (Rocky Mountain House)	1	15,999	1:15,999
10 (Camrose)	9	79,745	1: 8,861
11 (Edmonton excluding CMA)	6	22,039	1: 3,673
12 (Bonnyville)	4	43,907	1:10,977
13 (Whitecourt)	6	54,973	1: 9,162
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	2	22,794	1:11,397
16 (Fort McMurray)	5	48,779	1: 9,756
17 (High Level)	3	48,852	1:16,284
18 (Grande Cache)	1	13,587	1:13,587
19 (Grande Prairie)	6	72,997	1:12,166
Census Metropolitan Area of Calgary	30	671,326	1:22,378
Census Metropolitan Area of Edmonton	41	785,465	1:19,158
PROVINCIAL TOTAL	145	2,375,278	1:16,381

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	162[1]	142[2]	145[3]
% Change in Number of Practicing Personnel	12.5%	-12.3%	2.1%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio: - Alberta	1:14,583	1:16,704	1:16,381

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a two-year health records administrator diploma program. The program produced 16 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	8	16	16
2nd Year	14	10	16
Graduates:	12	14	16

[1] Source: Alberta Health and Social Service Education Programs Inventory, 1985-86. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Health Record Association offered a number of continuing education programs for its members in 1986.

HEALTH RECORD TECHNICIANS

I. OVERVIEW

Definition: Assist Health Record Administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: **Health Manpower Provincial Report, Manitoba, 1982**. Winnipeg, Manitoba: Manitoba Department of Health, 1982)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 279 health record technicians practicing in Alberta in 1986.[1] Health record technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for about half of the total. The provincial health record technician-to-population ratio was 1:8,514 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Sonya Stasiuk

c) Legislation:

There is no legislation regulating health record technicians in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING HEALTH RECORD TECHNICIANS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	56,592	1:18,864
2 (Lethbridge)	11	115,739	1:10,522
3 (Pincher Creek)	10	35,970	1: 3,597
4 (Hanna)	5	12,376	1: 2,475
5 (Drumheller)	5	38,805	1: 7,761
6 (Calgary excluding CMA)	5	98,279	1:19,656
7 (Stettler)	9	40,681	1: 4,520
8 (Red Deer)	13	116,611	1: 8,970
9 (Rocky Mountain House)	3	15,999	1: 5,333
10 (Camrose)	19	79,745	1: 4,197
11 (Edmonton excluding CMA)	8	22,039	1: 2,755
12 (Bonnyville)	7	43,907	1: 6,272
13 (Whitecourt)	11	54,973	1: 4,998
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	5	22,794	1: 4,559
16 (Fort McMurray)	11	48,779	1: 4,434
17 (High Level)	6	48,852	1: 8,142
18 (Grande Cache)	2	13,587	1: 6,794
19 (Grande Prairie)	9	72,997	1: 8,111
Census Metropolitan Area of Calgary	59	671,326	1:11,378
Census Metropolitan Area of Edmonton	75	785,465	1:10,473
PROVINCIAL TOTAL	279	2,375,278	1: 8,514

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	270[1]	303[2]	279[3]
% Change in Number of Practicing Personnel	-15.4%	12.2%	-7.9%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio: - Alberta	1: 8,750	1: 7,828	1: 8,514

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections, Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Southern Alberta Institute of Technology (S.A.I.T.) offers a 12-month health record technicians certificate program. The program produced 12 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[1]

	1983-84	1984-85	198586
Southern Alberta Institute of Technology (Program Length: 12 months)			
Enrolments:	25	19	25
Graduates:	16	11	12

[1] Source: **1985-86 Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Health Record Association provided a number of continuing education programs for its members in 1986.

MEDICAL LABORATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatability tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 2,207 medical laboratory technologists practicing in Alberta in 1986.[1] Medical laboratory technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for more than three-quarters of the total. The provincial medical laboratory technologist-to-population ratio was 1:1,076 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

Some of the basic laboratory services provided by medical laboratory technologists are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Carol Roblee

c) Legislation:

There is no legislation regulating medical laboratory technologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	39	56,592	1: 1,451
2 (Lethbridge)	90	115,739	1: 1,286
3 (Pincher Creek)	15	35,970	1: 2,398
4 (Hanna)	1	12,376	1:12,376
5 (Drumheller)	15	38,805	1: 2,587
6 (Calgary excluding CMA)	19	98,279	1: 5,173
7 (Stettler)	22	40,681	1: 1,849
8 (Red Deer)	91	116,611	1: 1,281
9 (Rocky Mountain House)	3	15,999	1: 5,333
10 (Camrose)	40	79,745	1: 1,994
11 (Edmonton excluding CMA)	31	22,039	1: 711
12 (Bonnyville)	11	43,907	1: 3,992
13 (Whitecourt)	13	54,973	1: 4,229
14 (Hinton)	10	25,309	1: 2,531
15 (Banff)	14	22,794	1: 1,628
16 (Fort McMurray)	46	48,779	1: 1,060
17 (High Level)	9	48,852	1: 5,428
18 (Grande Cache)	3	13,587	1: 4,529
19 (Grande Prairie)	42	72,997	1: 1,738
Census Metropolitan Area of Calgary	765	671,326	1: 878
Census Metropolitan Area of Edmonton	928	785,465	1: 846
PROVINCIAL TOTAL	2,207	2,375,278	1: 1,076

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1986

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	765	671,326	1: 874
Census Metropolitan Area of Edmonton	928	785,465	1: 826
Between 10,000 and 60,000			
Camrose	12	12,968	1: 1,081
Fort McMurray	40	34,949	1: 874
Grande Prairie	28	26,471	1: 945
Lethbridge	73	58,841	1: 806
Lloydminster	10	10,201	1: 1,020
Medicine Hat	38	41,804	1: 1,100
Red Deer	80	54,425	1: 680
Wetaskiwin	8	10,071	1: 1,259
Between 5,000 and 10,000			
Bonnyville	4	5,470	1: 1,368
Brooks	7	9,464	1: 1,352
Crownest Pass	4	6,912	1: 1,728
Drumheller	9	6,366	1: 707
Edson	3	7,323	1: 2,441
High River	8	5,096	1: 637
Hinton	7	8,629	1: 1,233
Innisfail	0	5,535	-
Lacombe	4	6,080	1: 1,520
Okotoks	0	5,214	-
Peace River	8	6,288	1: 786
Ponoka	5	5,473	1: 1,095
Rocky Mountain House	3	5,182	1: 1,727
Slave Lake	2	5,429	1: 2,715
St. Paul	4	5,030	1: 1,258
Stettler	8	5,147	1: 643
Taber	6	6,382	1: 1,064
Vegreville	3	5,276	1: 1,759
Whitecourt	2	5,737	1: 2,869
Under 5,000	138	552,724	1: 4,935
TOTAL	2,207	2,375,278	1: 1,076

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	1,957[1]	2,135[2]	2,207[3]
% Change in Number of Practicing Personnel	1.5%	9.1%	3.4%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:1,207	1:1,111	1:1,076
- Western Canada[6]	1:1,130	-	-

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

[6] Sources: (i) **Rollcall 83**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning Directorate, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report 1982-1984**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee. The figure for British Columbia refers to personnel who were registered (registration is not mandatory) and practicing. The Alberta figure refers to practicing personnel, while the figures for Manitoba and Saskatchewan refer to personnel registered with their respective provincial professional associations.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year medical laboratory technology diploma program. Together, the two programs produced 96 graduates in 1985-86. In addition, the University of Alberta offers a four-year bachelor of science program in medical laboratory science. The program produced 21 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	73	75	74
2nd Year	67	64	59
Graduates:	64	63	59
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	45	46	52
2nd Year	32	34	40
Graduates:	32	31	37
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	98	94	96

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
B. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	35	36	36
2nd Year	26	27	28
3rd Year	20	22	22
4th Year	14	15	21
Graduates:	14	15	21

[1] Source: **Alberta Health and Social Service Education Programs** Inventory, 1985-86. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Society of Medical Laboratory Technologists did not provide any continuing education programs in 1986. However, the Southern Alberta Institute of Technology and the Canadian Society of Laboratory Technologists did offer a number of updating courses.

MEDICAL RADIATION TECHNOLOGISTS

I. OVERVIEW

Definition: Radiographic Technologists

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theatre or other specialized area to assist physician or surgeon.

Radiation Oncology Technologists

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation onologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technologists

Prepare radioactive solutions and reagents and operate scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning

> equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.
>
> (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of 1986, regulations for medical radiation technologists were proclaimed and registration with the Health Disciplines Board took effect. In previous years, the number of persons employed was used as the indicator of manpower supply. Since these figures provide somewhat different information, data from 1986 and previous years are not comparable.

There were 1,089 medical radiation technologists registered with the Medical Radiation Technologists Committee in 1986.[1] Medical radiation technologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for two-thirds of the total. The provincial personnel-to-population ratio was 1:2,181.

Some of the basic x-ray services performed by medical radiation technologists are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: Medical Radiation Technologists Committee.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Medical Radiation Technologists Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Association of Medical Radiation Technologists
Room 202A, 2204 - 5th Avenue North
Lethbridge, Alberta
T1H 0N7

President: Mrs. Deanna Siewert

c) Legislation:

The designation of the discipline of medical radiation technology under the Health Disciplines Act received royal assent in June 1983. A Medical Radiation Technologists Committee was established by the Minister Responsible for Professions and Occupations in January 1984 to prepare draft regulations for this discipline.

In October 1985 regulations governing the discipline of medical radiation technologist were approved under the Health Disciplines Act. These regulations came into effect on December 31, 1985.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC BREAKDOWN OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	15	56,592	1:3,773
2 (Lethbridge)	53	115,739	1:2,184
3 (Pincher Creek)	14	35,970	1:2,569
4 (Hanna)	3	12,376	1:4,125
5 (Drumheller)	11	38,805	1:3,528
6 (Calgary-excluding CMA)	17	98,279	1:5,781
7 (Stettler)	16	40,681	1:2,543
8 (Red Deer)	45	116,611	1:2,591
9 (Rocky Mountain House)	5	15,999	1:3,200
10 (Camrose)	26	79,745	1:3,067
11 (Edmonton-excluding CMA)	39	22,039	1: 565
12 (Bonnyville)	15	43,907	1:2,927
13 (Whitecourt)	11	54,973	1:4,998
14 (Hinton)	4	25,309	1:6,327
15 (Banff)	9	22,794	1:2,533
16 (Fort McMurray)	20	48,779	1:2,439
17 (High Level)	9	48,852	1:5,428
18 (Grande Cache)	5	13,587	1:2,717
19 (Grande Prairie)	30	72,997	1:2,433
Census Metropolitan Area of Calgary	304	671,326	1:2,208
Census Metropolitan Area of Edmonton	419	785,465	1:1,875
Regional Location Unknown	19	-	-
PROVINCIAL TOTAL	1,089	2,375,278	1: 2,181

---

[1] Source: Medical Radiation Technologists Committee.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	304	671,326	1: 2,208
Census Metropolitan Area of Edmonton	419	785,465	1: 1,875
Between 10,000 and 60,000			
Camrose	5	12,968	1: 2,594
Fort McMurray	16	34,949	1: 2,184
Grande Prairie	14	26,471	1: 1,891
Lethbridge	35	58,841	1: 1,673
Lloydminster	3	10,201	1: 3,400
Medicine Hat	14	41,804	1: 2,986
Red Deer	35	54,425	1: 1,555
Wetaskiwin	8	10,071	1: 1,259
Between 5,000 and 10,000			
Bonnyville	3	5,470	1: 1,823
Brooks	7	9,464	1: 1,352
Crownest Pass	3	6,912	1: 2,304
Drumheller	4	6,366	1: 1,592
Edson	1	7,323	1: 7,323
High River	7	5,096	1: 728
Hinton	2	8,629	1: 4,315
Innisfail	2	5,535	1: 2,768
Lacombe	3	6,080	1: 2,027
Okotoks	2	5,214	1: 2,607
Peace River	3	6,288	1: 2,096
Ponoka	3	5,473	1: 1,824
Rocky Mountain House	2	5,182	1: 2,591
Slave Lake	1	5,429	1: 5,429
St.Paul	3	5,030	1: 1,677
Stettler	7	5,147	1: 735
Taber	4	6,382	1: 1,596
Vegreville	2	5,276	1: 2,638
Whitecourt	3	5,737	1: 1,912
Under 5,000	155	552,724	1: 3,566
Regional Location Unknown	19	-	-
TOTAL	1,089	2,375,278	1: 2,181

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[1] Source: Medical Radiation Technologists Committee.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	840[1]	926[2]	1,089[3]
% Change in Number Practicing Personnel	-3.6%	10.2%	N/A
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 2,812	1: 2,562	1: 2,181

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: Medical Radiation Technologists Committee. Since the source of of information for 1986 is different from the source of previous years, the data for 1986 and previous years are not comparable.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A person who wishes to become a medical radiation technologist can obtain training in one of three areas: radiography (medical x-ray technology), radiation oncology, and nuclear medicine. Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program. There were 54 graduates in 1985-86.

Both the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary offer a 27-month training program in radiation oncology technology. The programs produced five graduates in 1985-86.

Training programs in nuclear medicine technology, which are two years in length, are offered by the University of Alberta Hospitals in Edmonton and the Foothills Hospital in Calgary in conjunction with the Southern Alberta Institute of Technology. The program produced 10 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. PROGRAM IN MEDICAL X-RAY TECHNOLOGY			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	59	60	48
2nd Year	56	56	59
Graduates:	50	55	54

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
B. PROGRAMS IN RADIATION ONCOLOGY			
Cross Cancer Institute (Program Length: 27 months)			
Enrolments:			
1st Year	6	3	5
2nd Year	3	1	3
Graduates:	3	3	1
Tom Baker Cancer Centre (Program Length: 27 months)			
Enrolments:			
1st Year	4	3	3
2nd Year	4	4	-
Graduates:	2	3	4
PROVINCIAL TOTAL			
Number of Programs in Radiation Oncology: 2			
Graduates:	5	6	5
C. PROGRAM IN NUCLEAR MEDICINE			
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	16	16	16
2nd Year	9	13	11
Graduates:	9	9	10

---

[1] Source: Alberta Health and Social Service Education Programs Inventory, 1985-86. Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

Both the Alberta Association of Medical Radiation Technologists and the Canadian Association of Medical Radiation Technologists offered a number of continuing education seminars and courses in conjunction with their annual conferences.

OCCUPATIONAL HYGIENE TECHNOLOGISTS

I. OVERVIEW

Definition:	Under the supervision of an occupational hygienist, studies, evaluates and conducts a health program to control those environmental factors or stresses arising in a work situation which may cause sickness, injury or significant discomfort and inefficiency among workers. Collects, measures and analyzes samples of dust, gases, vapors and other potentially-toxic materials to determine adherence to prescribed standards. Investigates adequacy of ventilation, exhaust equipment, lighting and other conditions which may affect employee health. Performs sound-level evaluations to determine relationship of noise to employee discomfort and efficiency. Collaborates with other scientists and engineers to institute control and correction of hazards. Participates in education meetings to instruct employees in matters pertaining to occupational health. (Source: Department of Community and Occupational Health, Government of Alberta)

Since registration with the Alberta section of the American Industrial Hygiene Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 92 occupational hygiene technologists practicing in Alberta in 1986.[1] Occupational hygiene technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 72 percent of the total. The provincial occupational hygiene technologist-to-population ratio was 1:25,818 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATIVE INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

American Industrial Hygiene Association
(Alberta Section)
P.O. Box 130
Calgary, Alberta
T2P 2H7

President: Mr. H. Evans

c) Legislation:

There is no legislation regulating occupational hygiene technologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING OCCUPATIONAL HYGIENE TECHNOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	7	56,592	1: 8,805
2 (Lethbridge)	3	115,739	1:38,580
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	0	12,376	-
5 (Drumheller)	0	38,805	-
6 (Calgary-excluding CMA)	0	98,279	-
7 (Stettler)	0	40,681	-
8 (Red Deer)	5	116,611	1:23,322
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	1	79,745	1:79,745
11 (Edmonton excluding CMA)	0	22,039	-
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	0	54,973	-
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	0	22,794	-
16 (Fort McMurray)	3	48,779	1:16,260
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	4	72,997	1:18,249
Census Metropolitan Area of Calgary	30	671,326	1:22,378
Census Metropolitan Area of Edmonton	36	785,465	1:21,818
PROVINCIAL TOTAL	92	2,375,278	1: 25,818

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	67[1]	88[2]	92[3]
% Change in Number of Practicing Personnel	6.3%	31.3%	4.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1:35,260	1:26,955	1:25,818

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[1] Source: "September 30, 1984 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers an occupational hygiene diploma for occupational hygiene technologists. The program produced five graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Mount Royal Community College (Program Length: 2 years)			
Enrolments:			
1st year	-	12	11
2nd year	-	-	11
Graduates:	-	-	5

[1] Source: **Alberta Health and Social Services Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

Various seminars in the field of occupational hygiene were offered by the Alberta section of the American Industrial Hygiene Association. As well, other continuing education programs were offered by the American Conference of Governmental Industrial Hygienists and the American Board of Industrial Hygiene.

OCCUPATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer tests and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 330 occupational therapists practicing in Alberta in 1986.[1] Occupational therapists employed in the Census Metropolitan Areas of

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

Calgary and Edmonton accounted for almost 80 percent of the total. The provincial occupational therapist-to-population ratio was 1:7,198 in 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Registered
Occupational Therapists
300, 5241 - Calgary Trail Southbound N.W.
Edmonton, Alberta
T6H 5G8

President: Ms. Rita den Otter

c) Legislation:

There is no legislation regulating occupational therapists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING OCCUPATIONAL THERAPISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,592	1: 9,432
2 (Lethbridge)	3	115,739	1:38,580
3 (Pincher Creek)	1	35,970	1:35,970
4 (Hanna)	0	12,376	-
5 (Drumheller)	2	38,805	1:19,403
6 (Calgary-excluding CMA)	5	98,279	1:19,656
7 (Stettler)	1	40,681	1:40,681
8 (Red Deer)	17	116,611	1: 6,859
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	5	79,745	1:15,949
11 (Edmonton-excluding CMA)	6	22,039	1: 3,673
12.(Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	4	54,973	1:13,743
14 (Hinton)	0	25,306	-
15 (Banff)	3	22,794	1: 7,598
16 (Fort McMurray)	2	48,779	1:24,390
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	11	72,997	1: 6,636
Census Metropolitan Area of Calgary	108	671,326	1: 6,216
Census Metropolitan Area of Edmonton	154	785,465	1: 5,100
PROVINCIAL TOTAL	330	2,375,278	1: 7,198

---

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	266[1]	296[2]	330[3]
% Change in Number of Practicing Personnel	N/A	N/A	11.5%
Population (Alberta)[4]	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 8,881	1: 8,014	1: 7,198
- Western Alberta	-	1: 7,933	-

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is mainly due to the fact that the 1984 survey is not a comprehensive survey. Therefore, not all practicing occupational therapists in the province were counted in 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

[6] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A four-year bachelor of science program in occupational therapy is offered at the University of Alberta. The program produced 45 graduates in 1985-86.

Under an interprovincial training agreement, five training places per year are reserved for Saskatchewan students in the occupational therapy program at the University of Alberta.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Profes-sional Yr	Pre-Profes-sional Yr	Pre-Profes-sional Yr
2nd Year	41	40	40
3rd Year	37	44	40
4th Year	49	51	53
Graduates:	42	39	45

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Alberta Association of Registered Occupational Therapists offered a number of courses for its members, and sponsored various workshops related to occupational therapy. The Faculty of Continuing Education of the University of Calgary also offered programs for occupational therapists.

OPHTHALMIC DISPENSERS

I. OVERVIEW

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthamologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, RSA 1980)

There were 340 ophthalmic dispensers who resided in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1986.[1] Ophthalmic dispensers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for four-fifths of the total. The number of ophthalmic dispensers registered in Alberta grew by 16 percent between 1984 and 1986, while the provincial population increased by 0.5 percent during the same period. The provincial ophthalmic dispenser-to-population ratio was 1:6,986 in 1986.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of September 9, 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Guild of Ophthalmic Dispensers
Room 306, Guardian Building
10240 - 124 Street
Edmonton, Alberta
T5N 3W6

President: Mr. Murray Scambler

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practice as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. The Board sets the educational qualifications and examinations required for obtaining a certificate of competency or a special certificate of competency in dispensing contact lenses in order to be registered.

Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers, the professional association. Annual re-registration is required in order for ophthalmic dispensers to continue to practice in Alberta. The Alberta Guild of Ophthalmic Dispensers is responsible for regulating the conduct of its members and for maintaining professional discipline.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF OPHTHALMIC DISPENSERS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	56,592	1: 7,074
2 (Lethbridge)	20	115,739	1: 5,787
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	0	12,376	-
5 (Drumheller)	1	38,805	1:38,805
6 (Calgary-excluding CMA)	3	98,279	1:32,760
7 (Stettler)	2	40,681	1:20,341
8 (Red Deer)	15	116,611	1: 7,774
9 (Rocky Mountain House)	3	15,999	1: 5,333
10 (Camrose)	6	79,745	1:13,291
11 (Edmonton excluding CMA)	4	22,039	1: 5,510
12 (Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	0	54,973	-
14 (Hinton)	1	25,309	1:25,309
15 (Banff)	0	22,794	-
16 (Fort McMurray)	3	48,779	1:16,260
17 (High Level)	1	48,852	1:48,852
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	7	72,997	1:10,428
Census Metropolitan Area of Calgary	111	671,326	1: 6,048
Census Metropolitan Area of Edmonton	153	785,465	1: 5,134
PROVINCIAL TOTAL	340	2,375,278	1: 6,986

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of September 9, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	292	321	340
% Change in Number of Registered Personnel	5.1%	9.9%	5.9%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 8,090	1: 7,389	1: 6,986

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics October, 1984.

[3] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A two year correspondence course in ophthalmic dispensing is offered through the Northern Alberta Institute of Technology. In conjunction with this program, individuals must serve a two year apprenticeship in an optical laboratory or dispensary before being eligible to write the registration examinations of the Ophthalmic Dispensers Examining Board.

b) Continuing Education Programs:

The Alberta Guild of Ophthalmic Dispensers held its annual convention and also made available a number of materials and lectures relevant to ophthalmic dispensing.

OPTOMETRISTS

I. OVERVIEW

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, its related structures and the human vision system in order to measure, assess, diagnose or refer for consultation or treatment any condition of the human eye, its related structures and the human vision system;

(ii) the treatment of conditions of the human eye, its related structures and the human vision system, through the prescribing and dispensing of ophthalmic appliances or other aids, the prescribing and provision of orthoptics or perceptual training and the offering of advice, consultation or counselling;

(Source: Optometry Profession Act, S.A. 1983, Ch. 0-16)

There were 211 optometrists who resided in Alberta and registered with the Alberta Association of Optometrists (A.A.O.) in 1986.[1] Optometrists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 61 percent of the total. Some optometrists in the larger urban centres operate satellite offices in neighboring rural areas and smaller centres throughout the province. Some of the services provided by optometrists, such as the dispensing of ophthalmic appliances, can also be provided by ophthalmic dispensers (see chapter on Ophthalmic Dispensers).

The number of optometrists registered in Alberta increased by 12.8 per cent between 1984 and 1986, while the provincial population increased by 0.5 percent during the same period. The provincial optometrist-to-population ratio was 1: 11,257 in 1986.

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31,

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Association of Optometrists
No. 1, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. R. Glen Campbell

b) Professional Association:

Alberta Association of Optometrists
No. 1, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

President: Dr. Gordon Hensel

c) Legislation:

Under the authority of the Optometry Profession Act, all individuals who wish to practice as optometrists must apply for registration with the Alberta Association of Optometrists (A.A.O.).

The A.A.O. is responsible for discipline and practice review. The Universities Coordinating Council approves educational qualifications and prescribes examinations for registration under the act.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC BREAKDOWN OF REGISTERED OPTOMETRISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,592	1:14,148
2 (Lethbridge)	16	115,739	1: 7,234
3 (Pincher Creek)	1	35,970	1:35,970
4 (Hanna)	1	12,376	1:12,376
5 (Drumheller)	0	38,805	-
6 (Calgary-excluding CMA)	5	98,279	1:19,656
7 (Stettler)	2	40,681	1:20,341
8 (Red Deer)	18	116,611	1: 6,478
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	6	79,745	1:13,291
11 (Edmonton-excluding CMA)	8	22,039	1: 2,755
12 (Bonnyville)	5	43,907	1: 8,781
13 (Whitecourt)	5	54,973	1:10,995
14 (Hinton)	1	25,309	1:25,309
15 (Banff)	0	22,794	-
16 (Fort McMurray)	2	48,779	1:24,390
17 (High Level)	3	48,852	1:16,284
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	6	72,997	1:12,166
Census Metropolitan Area of Calgary	59	671,326	1:11,378
Census Metropolitan Area of Edmonton	69	785,465	1:11,384
PROVINCIAL TOTAL	211	2,375,278	1: 11,257

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1986. Excludes honorary, inactive, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF OPTOMETRISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	59	671,326	1: 11,378
Census Metropolitan Area of Edmonton	69	785,465	1: 11,384
Between 10,000 and 60,000			
Camrose	5	12,968	1: 2,594
Fort McMurray	3	34,949	1: 11,650
Grande Prairie	4	26,471	1: 6,618
Lethbridge	13	58,841	1: 4,526
Lloydminster	2	10,201	1: 5,101
Medicine Hat	4	41,804	1: 10,451
Red Deer	13	54,425	1: 4,187
Wetaskiwin	4	10,071	1: 2,518
Between 5,000 and 10,000			
Bonnyville	1	5,470	1: 5,470
Brooks	2	9,464	1: 4,732
Crowsnest Pass	0	6,912	-
Drumheller	3	6,366	1: 2,122
Edson	0	7,323	1: 7,323
High River	2	5,096	1: 2,548
Hinton	1	8,629	1: 8,629
Innisfail	1	5,535	1: 5,535
Lacombe	3	6,080	1: 2,027
Okotoks	1	5,214	1: 5,214
Peace River	2	6,288	1: 3,144
Ponoka	3	5,473	1: 1,824
Rocky Mountain House	1	5,182	1: 5,182
Slave Lake	2	5,429	1: 2,715
St. Paul	2	5,030	1: 2,515
Stettler	3	5,147	1: 1,716
Taber	2	6,382	1: 3,191
Vegreville	1	5,276	1: 5,276
Whitecourt	2	5,737	1: 2,869
Under 5,000	12	552,724	1:276,362
TOTAL	211	2,375,278	1: 11,257

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[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta as of December 31, 1986. Excludes honorary, inactive, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	187	210	211
% Change in Number of Registered Personnel	-5.1%	12.3%	0.5%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 12,633	1: 11,295	1: 11,257
- Western Canada[4]	-	1: 12,297	-

[1] Source: Alberta Association of Optometrists. Number of optometrists registered with the A.A.O. and residing in Alberta. Excludes honorary, inactive, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] Sources: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to optometrists registered with their respective provincial professional associations.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program at the University of Waterloo.

In September 1981 the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1986 Alberta had a total of 23 students enrolled in the four-year training program at the University of Waterloo under the current agreement.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

b) Continuing Education Programs:

Two educational seminars were sponsored by the Alberta Association of Optometrists. The Gimbel Eye Foundation also provided a seminar on relevant issues.

PHARMACISTS

I. OVERVIEW

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,913 pharmacists who resided in Alberta and registered with the Alberta Pharmaceutical Association (A.P.A.) in 1986.[1] Pharmacists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of the total. The number of pharmacists registered in Alberta grew by 2.2 percent between 1984 and 1986 while the provincial population increased by 0.5 percent during the same period. The provincial pharmacist-to-population ratio was 1: 1,242 in 1986.

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1986. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

Registrar: Mr. Larry Shipka

b) Professional Association:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

President: Mr. Donald Vickerson

c) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practice as pharmacists must register with the Alberta Pharmaceutical Association (A.P.A.). Annual re-registration with the Association is required of all pharmacists who wish to continue to practice in Alberta.

The Alberta Pharmaceutical Association is also responsible for regulating the conduct of its members and for maintaining discipline. The Pharmaceutical Association Act sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED PHARMACISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	48	56,592	1:1,179
2 (Lethbridge)	90	115,739	1:1,286
3 (Pincher Creek)	25	35,970	1:1,439
4 (Hanna)	8	12,376	1:1,547
5 (Drumheller)	30	38,805	1:1,294
6 (Calgary excluding CMA)	44	98,279	1:2,234
7 (Stettler)	22	40,681	1:1,849
8 (Red Deer)	100	116,611	1:1,166
9 (Rocky Mountain House)	7	15,999	1:2,286
10 (Camrose)	63	79,745	1:1,266
11 (Edmonton excluding CMA)	79	22,039	1: 279
12 (Bonnyville)	34	43,907	1:1,291
13 (Whitecourt)	38	54,973	1:1,447
14 (Hinton)	14	25,309	1:1,808
15 (Banff)	20	22,794	1:1,140
16 (Fort McMurray)	22	48,779	1:2,217
17 (High Level)	25	48,852	1:1,954
18 (Grande Cache)	6	13,587	1:2,265
19 (Grande Prairie)	42	72,997	1:1,738
Census Metropolitan Area of Calgary	509	671,326	1:1,319
Census Metropolitan Area of Edmonton	687	785,465	1:1,143
PROVINCIAL TOTAL	1,913	2,375,278	1:1,242

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1986. Excludes inactive, honorary, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF PHARMACISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	509	671,326	1: 1,319
Census Metropolitan Area of Edmonton	687	785,465	1: 1,143
Between 10,000 and 60,000			
Camrose	20	12,968	1: 648
Fort McMurray	23	34.949	1: 1,520
Grande Prairie	22	26,471	1: 1,203
Lethbridge	56	58,841	1: 1,051
Lloydminster	10	10,201	1: 1,020
Medicine Hat	44	41,804	1: 950
Red Deer	53	54,425	1: 1,027
Wetaskiwin	13	10,071	1: 775
Between 5,000 and 10,000			
Bonnyville	8	5,470	1: 684
Brooks	10	9,464	1: 946
Crowsnest Pass	0	9,912	-
Drumheller	12	6,366	1: 637
Edson	7	7,323	1: 1,046
High River	4	5,096	1: 1,274
Hinton	6	8,629	1: 1,438
Innisfail	13	5,535	1: 426
Lacombe	6	6,080	1: 1,013
Okotoks	6	5,214	1: 869
Peace River	8	6,288	1: 786
Ponoka	10	5,473	1: 547
Rocky Mountain House	6	5,182	1: 864
Slave Lake	3	5,429	1: 1,810
St. Paul	7	5,030	1: 719
Stettler	6	5,147	1: 858
Taber	8	6,382	1: 798
Vegreville	8	5,276	1: 660
Whitecourt	4	5,737	1: 1,434
Under 5,000	344	552,724	1: 1,607
TOTAL	1,913	2,375,278	1: 1,242

---

[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with A.P.A. and residing in Alberta as of December 31, 1986. Excludes inactive, honorary, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number Registered[1]	1,872	1,881	1,913
% Change in Number Registered	3.1%	0.5%	1.7%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 1,262	1: 1,261	1: 1,242
- Western Canada[4]	-	1: 1,295	-

[1] Source: Alberta Pharmaceutical Association. Number of Pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1983, 1984, and 1985. Excludes inactive, honorary, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] Source: (i) **Rollcall 85**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1986. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy Research and Management Services, Saskatchewan Health, Regina, Saskatchewan. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to pharmacists registered with their respective provincial professional associations.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year baccalaureate program in pharmacy. The program produced 66 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	100	104	102
2nd Year	96	93	117
3rd Year	64	88	91
4th Year	85	60	67
Graduates:	75	60	66

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

Pharacists must participate in continuing education programs to meet re-registration requirements. The Division of Continuing Pharmacy Education of the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta annually publishes a booklet, "Prospectives", which outlines continuing education programs and courses that are currently available for pharmacists. The programs are sponsored by the Faculty of Pharmacy and Pharmaceutical Sciences, the Alberta Pharmaceutical Association, and various pharmaceutical manufacturing companies.

Continuing education programs are available to members through other sources: the Canadian Pharmaceutical Association, the American Pharmaceutical Association, The Canadian Conference of Continuing Education in Pharmacy, and some pharmaceutical manufacturing companies.

PHARMACY ASSISTANTS

I. OVERVIEW

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemicals or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keep inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 394 pharmacy assistants practicing in Alberta in 1986.[1] Pharmacy assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of the total. The provincial pharmacy assistant-to-population ratio was 1:6,029 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

None.

c) Legislation:

There is no legislation regulating pharmacy assistants in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC BREAKDOWN OF PRACTICING PHARMACY ASSISTANTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	56,592	1: 6,288
2 (Lethbridge)	20	115,739	1: 5,787
3 (Pincher Creek)	3	35,970	1:11,990
4 (Hanna)	2	12,376	1: 6,188
5 (Drumheller)	2	38,805	1:19,403
6 (Calgary excluding CMA)	3	98,279	1:32,760
7 (Stettler)	9	40,681	1: 4,520
8 (Red Deer)	20	116,611	1: 5,831
9 (Rocky Mountain House)	1	15,999	1:15,999
10 (Camrose)	15	79,745	1: 5,316
11 (Edmonton excluding CMA)	5	22,039	1: 4,408
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	1	54,973	1:54,973
14 (Hinton)	5	25,309	1: 5,062
15 (Banff)	0	22,794	-
16 (Fort McMurray)	12	48,779	1: 4,065
17 (High Level)	3	48,852	1:16,284
18 (Grande Cache)	2	13,587	1: 6,794
19 (Grande Prairie)	14	72,997	1: 5,214
Census Metropolitan Area of Calgary	122	671,326	1: 5,503
Census Metropolitan Area of Edmonton	146	785,465	1: 5,380
PROVINCIAL TOTAL	394	2,375,278	1: 6,029

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Practicing Personnel	120[1]	319[2]	394[3]
% Change in Number of Practicing Personnel	N/A	N/A	23.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 19,687	1:7,436	1: 6,029

1 Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: Because pharmacies were not surveyed in 1984, not all practicing pharmacy assistants in the province were counted in 1984.

2 Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1985. Note: Comparison with the 1984 survey is not possible since it was not a comprehensive survey.

3 Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: "Alberta Health and Social Services Disciplines Committee, December 1986.

4 Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

5 Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to the establishment of the pharmacy technology program, most pharmacy assistants in Alberta were trained on the job. However, in 1976 a ten-month program leading to a pharmacy technician certificate was established at the Red Deer College. The program produced 36 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Red Deer Community College (Program Length: 10 months)			
Enrolments:	36	43	42
Graduates:	33	33	36

[1] Source: **Alberta Health and Social Services Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

There were no continuing education programs for pharmacy assistants in Alberta in 1986.

PHYSICAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Give whirlpool and contrast baths and apply moist packs. Administer treatments, using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electro-therapeutic equipment. Instruct patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,043 physical therapists who resided in Alberta and registered with the College of Physical Therapists in 1986. Physical therapists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial physical therapist-to population ratio was 1: 2,277 in 1986.

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, and non-practicing members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

College of Physical Therapists of Alberta
#302, 6020 - 104 Street
Edmonton, Alberta
T6H 5S4

Registrar: Ms. Joanne Horne

b) Professional Association:

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Jennifer Rafler

c) Legislation:

The Physical Therapy Profession Act was proclaimed on September 30, 1985 (except Sec. 3 (1)) replacing the Chartered Physiotherapists Act. The Act does not require mandatory registration of all physical therapists practicing in the province, but all individuals who wish to use the title of "physical therapist" or "physiotherapist" alone or in combination with other words must register with the College of Physical Therapists. Employers may only hire registered members to perform physical therapy services. Annual re-registration is required of all individuals who wish to continue to use the reserved titles.

The College of Physical Therapists of Alberta is responsible for regulating the conduct of its members and for maintaining professional discipline. The Universities Coordinating Council sets the educational qualifications and determines equivalencies required for registration.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC BREAKDOWN OF REGISTERED PHYSICAL THERAPISTS
ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	14	56,592	1:4,042
2 (Lethbridge)	29	115,739	1:3,991
3 (Pincher Creek)	9	35,970	1:3,997
4 (Hanna)	3	12,376	1:4,125
5 (Drumheller)	4	38,805	1:9,701
6 (Calgary excluding CMA)	18	98,279	1:5,460
7 (Stettler)	6	40,681	1:6,780
8 (Red Deer)	41	116,611	1:2,844
9 (Rocky Mountain House)	3	15,999	1:5,333
10 (Camrose)	20	79,745	1:3,987
11 (Edmonton excluding CMA)	7	22,039	1:3,148
12 (Bonnyville)	8	43,907	1:5,488
13 (Whitecourt)	10	54,973	1:5,497
14 (Hinton)	7	25,309	1:3,616
15 (Banff)	7	22,794	1:3,256
16 (Fort McMurray)	16	48,779	1:3,049
17 (High Level)	6	48,852	1:8,142
18 (Grande Cache)	2	13,587	1:6,794
19 (Grande Prairie)	21	72,997	1:3,476
Census Metropolitan Area of Calgary	350	671,326	1:1,918
Census Metropolitan Area of Edmonton	462	785,465	1:1,700
PROVINCIAL TOTAL	1,043	2,375,278	1:2,277

[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, and non-practicing members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF PHYSICAL THERAPISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	350	671,326	1: 1,918
Census Metropolitan Area of Edmonton	462	785,465	1: 1,700
Between 10,000 and 60,000			
Camrose	8	12,968	1: 1,621
Fort McMurray	15	34,949	1: 2,329
Grande Prairie	16	26,471	1: 1,654
Lethbridge	22	58,841	1: 2,675
Lloydminster	3	10,201	1: 3,400
Medicine Hat	14	41,804	1: 2,986
Red Deer	28	54,425	1: 1,944
Wetaskiwin	4	10,071	1: 2,518
Between 5,000 and 10,000			
Bonnyville	1	5,470	1: 5,470
Brooks	2	9,464	1: 4,732
Crownest Pass	0	6,912	-
Drumheller	1	6,366	1: 6,366
Edson	3	7,323	1: 2,441
High River	2	5,096	1: 2,548
Hinton	4	8,629	1: 2,157
Innisfail	1	5,535	1: 5,535
Lacombe	2	6,080	1: 3,040
Okotoks	3	5,214	1: 1,738
Peace River	3	6,288	1: 2,096
Ponoka	4	5,473	1: 1,368
Rocky Mountain House	3	5,182	1: 1,727
Slave Lake	2	5,429	1: 2,715
St. Paul	1	5,030	1: 5,030
Stettler	1	5,147	1: 5,147
Taber	0	6,382	1: -
Vegreville	2	5,276	1: 2,638
Whitecourt	2	5,737	1: 2,869
Under 5,000	84	552,724	1: 6,580
TOTAL	1,043	2,375,278	1: 2,277

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[1] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, and non-practicing members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICAL THERAPISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	598[1]	942[2]	1,043[2]
% Change in Number of Practicing Personnel	N/A	N/A[3]	10.7%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 3,951	1: 2,518	1: 2,277

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The 1984 survey is not a comprehensive survey, and not all physical therapists in the province were counted.

[2] Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 1985 and 1986. Excludes out-of-province, retired, and non-practicing members.

[3] Since the 1985 manpower information is from the College of Physical Therapists, and information for previous years is from the surveys of employers, the data are not comparable.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to 1977, the University of Alberta offered a three-year diploma program and a four-year baccalaureate degree program in physical therapy. Now, only the four-year baccalaureate degree program is offered. The program produced 45 graduates in 1985-86. In addition, the University of Alberta also offers a master's degree program in physical therapy, which is approximately two years in length. The program produced three graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICAL THERAPISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	46	46	46
2nd Year	41	43	43
3rd Year	43	40	40
4th Year[2]	43	48	51
Graduates:	45	42	45
B. MASTER'S PROGRAM			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	3	1	1
2nd Year	5	3	1
3rd Year	3	4	6
Graduates:	1	3	3

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program returning to complete the baccalaureate degree program.

b) Continuing Education Programs:

The Alberta Physiotherapy Association and local district branches of the Canadian Physiotherapy Association offered a number of continuing education programs relevant to physical therapy.

PHYSICIANS

I. OVERVIEW

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 3,906 physicians who resided in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1986.[1] Of these, 53 percent were general practitioners and 47 percent were specialists. The number of physicians by specialty is shown in the table on page 194.

Physicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. Approximately 11 percent were located in communities with a population of between 10,000 and 60,000. About 4 percent were located in communities with a population of between 5,000 and 10,000; and 9 percent were located in communities with a population of less than 5,000. The number of physicians registered in Alberta grew by 5.5 percent between 1984 and 1986, while the provincial population increased by 0.5 percent during the same period. The physician-to-population ratio was 1:608 in 1986.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians fully registered with the College of Physicians and Surgeons and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche

b) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

President: Dr. R.J. Kennedy

c) Legislation:

Under the authority of the Medical Profession Act, all individuals who wish to practice as physicians or osteopaths must register with the College of Physicians and Surgeons of Alberta. Annual re-registration with the College is a requirement for continued practice.

The College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for maintaining professional discipline. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist. The College also prescribes the educational qualifications and conditions of practice of physicians registered on its special registries.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICIANS ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	66	56,592	1: 857
2 (Lethbridge)	162	115,739	1: 714
3 (Pincher Creek)	37	35,970	1: 972
4 (Hanna)	11	12,376	1:1,125
5 (Drumheller)	33	38,805	1:1,176
6 (Calgary excluding CMA)	47	98,279	1:2,091
7 (Stettler)	32	40,681	1:1,271
8 (Red Deer)	166	116,611	1: 702
9 (Rocky Mountain House)	11	15,999	1:1,454
10 (Camrose)	72	79,745	1:1,108
11 (Edmonton excluding CMA)	23	22,039	1: 958
12 (Bonnyville)	41	43,907	1:1,071
13 (Whitecourt)	37	54,973	1:1,486
14 (Hinton)	21	25,309	1:1,205
15 (Banff)	29	22,794	1: 786
16 (Fort McMurray)	43	48,779	1:1,134
17 (High Level)	33	48,852	1:1,480
18 (Grande Cache)	8	13,587	1:1,698
19 (Grande Prairie)	68	72,997	1:1,073
Census Metropolitan Area of Calgary	1,297	671,326	1: 518
Census Metropolitan Area of Edmonton	1,669	785,465	1: 470
PROVINCIAL TOTAL	3,906	2,375,278	1: 608

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF PHYSICIANS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,297	671,326	1: 518
Census Metropolitan Area of Edmonton	1,669	785,465	1: 471
Between 10,000 and 60,000			
Camrose	20	12,968	1: 648
Fort McMurray	36	34,949	1: 971
Grande Prairie	41	26,471	1: 646
Lethbridge	129	58,841	1: 456
Lloydminster	14	10,201	1: 729
Medicine Hat	60	41,804	1: 697
Red Deer	111	54,425	1: 490
Wetaskiwin	19	10,071	1: 530
Between 5,000 and 10,000			
Bonnyville	9	5,470	1: 608
Brooks	10	9,464	1: 946
Crowsnest Pass	0	6,912	-
Drumheller	14	6,366	1: 455
Edson	9	7,323	1: 814
High River	8	5,096	1: 637
Hinton	12	8,629	1: 719
Innisfail	9	5,535	1: 615
Lacombe	9	6,080	1: 676
Okotoks	8	5,214	1: 652
Peace River	10	6,288	1: 629
Ponoka	21	5,473	1: 261
Rocky Mountain House	11	5,182	1: 471
Slave Lake	8	5,429	1: 679
St. Paul	7	5,030	1: 719
Stettler	8	5,147	1: 643
Taber	7	6,382	1: 912
Vegreville	8	5,276	1: 660
Whitecourt	5	5,737	1: 1,147
Under 5,000	337	552,724	1: 1,640
TOTAL	3,906	2,375,278	1: 608

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	3,701	3,773	3,906
% Change in Number of Registered Personnel	11.6%	1.9%	3.5%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 638	1: 629	1: 608
- Western Canada[4]	1: 554	-	-

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] The 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to physicians registered with their respective provincial professional associations.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two medical schools in Alberta, located at the University of Alberta and the University of Calgary. The University of Alberta program is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. Successful completion of a two-year pre-medicine program is the basic entry requirement for both programs. The two programs together produced 178 graduates in 1985-86.

Alberta has a two-year pre-licensure requirement for post-graduate generalists. Post-graduate physicians pursuing a specialty certification must complete an approved residency training period in an accredited teaching hospital and write and pass the certification examinations of the Royal College of Physicians and Surgeons of Canada.

With respect to post-graduate medical training, the Department of Hospitals and Medical Care establishes the number of funded intern/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During academic year 1986-87, 655 full-time-equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Hospitals and Medical Care.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1983-84	1984-85	1985-86
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	119	120	119
2nd Year	115	117	116
3rd Year	114	112	119
4th Year	115	114	101
Graduates:	118	115	109
University of Calgary (Program Length: 3 years)			
Enrolments:			
1st Year	74	74	73
2nd Year	72	72	72
3rd Year	71	70	73
Graduates:	67	69	69
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	182	183	178

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Departments of Continuing Medical Education at the University of Alberta and the University of Calgary continued to offer various education programs for physicians in 1986. In addition, the Alberta Medical Association and other organizations and agencies offered various continuing education programs.

TABLE 4 PHYSICIANS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1986[1]

Specialty	Number of Physicians	Personnel-to-Population Ratio
Anaesthesia	151	1: 15,730
Anatomical Pathology	35	1: 67,865
Cardiology	34	1: 69,861
Cardiovascular & Thoracic Surgery	17	1: 139,722
Clinical Immunology	1	1:2,375,278
Community Medicine	16	1: 148,455
Dermatology	22	1: 107,967
Diagnostic Radiology	157	1: 15,129
Endrocrinology Metabolism	5	1: 475,056
Emergency Medicine	20	1: 118,764
Gastroenterology	19	1: 125,015
General Pathology	63	1: 37,703
General Surgery	169	1: 14,055
Geriatric Medicine	1	1:2,375,278
Haematological Pathology	4	1: 593,820
Haematology	7	1: 339,325
Infectious Diseases	5	1: 475,056
Internal Medicine	304	1: 7,813
Medical Biochemistry	5	1: 475,056
Medical Microbiology	10	1: 237,528
Medical Oncology	1	1:2,375,278
Nephrology	3	1: 791,759
Neurology	37	1: 64,197
Neuropathology	5	1: 475,056
Neurosurgery	16	1: 148,455
Nuclear Medicine	9	1: 263,920
Obstetrics & Gynaecology	118	1: 20,129
Ophthalmology	67	1: 35,452
Orthopaedic Surgery	77	1: 30,848
Otolaryngology	31	1: 76,622
Pediatrics	152	1: 15,627
Pediatric Cardiology	1	1:2,375,278
Pediatrics General Surgery	3	1: 791,759
Physical Medicine & Rehabilitation	13	1: 182,714
Plastic Surgery	27	1: 87,973
Psychiatry	158	1: 15,033
Radiation Oncology	22	1: 107,967
Respiratory Medicine	16	1: 148,455
Rheumatology	13	1: 182,714
Thoracic Surgery	1	1:2,375,278
Urology	35	1: 67,865
Vascular Surgery	3	1: 791,759
Specialty Total	1,853	1: 1,282
General Practice	2,053	1: 1,157
GRAND TOTAL	3,906	1: 608

[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1986. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

PODIATRISTS

I. OVERVIEW

Definition: A Podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: Podiatry Act, RSA 1980)

There were 19 podiatrists who resided in Alberta and registered with the Alberta Podiatry Association (A.P.A.) in 1986.[1]. All were located in the four major urban centres: the Census Metropolitan Areas of Calgary and Edmonton and the cities of Lethbridge and Medicine Hat. The provincial podiatrist-to-population ratio was 1:125,015 in 1986.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Examiners in Podiatry
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Podiatry Association
134 - 8500 MacLeod Trail
Calgary, Alberta
T2H 2N1

President: Dr. Paul Kruper

c) Legislation:

Individuals who wish to practice as podiatrists in Alberta apply to the Board of Examiners for Podiatry, a provincial certification body. The Board sets the educational qualifications required for registration and certifies eligible individuals. Successful candidates register with the Alberta Podiatry Association (A.P.A.) the professional body responsible for registration and discipline of its members.

In June, 1987, an amendment to the Podiatry Act removed the exclusive scope of practice clause in order to allow other qualified individuals, such as nurses, to offer foot care services. Although the mandatory requirements of the act have been removed, individuals who wish to practice podiatry and bill services to the provincial health care insurance program are still required to obtain certification through the Board and maintain membership in the Association.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF REGISTERED PODIATRISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	56,592	1: 56,592
2 (Lethbridge)	1	115,739	1:115,739
Other Census Divisions[3]	0	746,156	-
Census Metropolitan Area of Calgary	10	671,326	1: 67,133
Census Metropolitan Area of Edmonton	7	785,465	1:112,209
PROVINCIAL TOTAL	19	2,375,278	1:125,015

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

[3] Excludes the Census Metropolitan Areas of Calgary and Edmonton.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	18	18	19
% Change in Number of Registered Personnel	0.0%	0.0%	5.6%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:131,244	1:131,778	1:125,015

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1984, 1985 and 1986.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no training programs for podiatrists in Canada. The United States has five schools of podiatry. The programs consist of four years of professional training with two prerequisite years of university studies. Most of Alberta's podiatrists were trained in the United States.

b) Continuing Education Programs:

A number of continuing education programs were offered throughout Canada and the United States, which podiatrists were encouraged to attend.

PROSTHETISTS AND ORTHOTISTS

I. OVERVIEW

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 31 prosthetists and orthotists practicing in Alberta in 1986.[1] All were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial prosthetist/orthotist-to-population ratio was 1:76,622 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Prosthetists and Orthotists
Red Deer Prosthetists and Orthotists Lab Ltd.
#7, 7464 - 50A Avenue
Red Deer, Alberta
T4N 4E7

President: Mr. Harry Moe

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1986

Census Metropolitan Area	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Census Metropolitan Area of Calgary	15	671,326	1: 44,755
Census Metropolitan Area of Edmonton	16	785,465	1: 49,092
Areas other than CMA Calgary and CMA Edmonton	0	918,487	-
PROVINCIAL TOTAL	31	2,375,278	1: 76,622

[1] Source: "March 31, 1986 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	45[1]	38[2]	31[3]
% Change in Number of Practicing Personnel	80.0%	-15.6%	-18.4%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratio: - Alberta	1: 52,498	1: 62,421	1: 76,622

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on-the-job, some have been trained in post-secondary educational institutions in other provinces such as the British Columbia Institute of Technology

(B.C.I.T.). Alberta signed an inter-provincial training agreement with B.C.I.T. and the British Columbia Government in 1981 to purchase two training places for prosthetists and orthotists at the B.C.I.T. every two years.

b) Continuing Education Programs:

A Canadian bi-annual convention offered educational seminars in 1986. There were also educational seminars offered by manufacturers of orthotic and prosthetic products.

PSYCHIATRIC NURSES

I. OVERVIEW

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,031 psychiatric nurses who resided in Alberta and registered with the Psychiatric Nurses' Association of Alberta (P.N.A.A.) in 1986.[1] However, registration with the P.N.A.A. is not mandatory in order to practice in the province. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 709 psychiatric nurses employed in health and social service agencies and institutions in 1986.[2]

Psychiatric nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 62 percent of the total. The psychiatric nurse-to-population ratio was 1:2,304 in 1986.

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[1] Source: Psychiatric Nurses' Association of Alberta Number of psychiatric nurses registered with the P.N.A.A. and residing in Alberta as of December 31, 1986.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Advisory Committee to the Psychiatric
Nursing Training Act
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Psychiatric Nurses Association of Alberta
#201 9711-45 Avenue
Edmonton, Alberta
T6E 5V8

President: Mr. D.C. Buist

c) Legislation:

The Psychiatric Nursing Training Act restricts the practice of psychiatric nursing to persons certified by the Advisory Committee to the Psychiatric Nursing Training Act and to registered or graduate nurses. According to the Psychiatric Nurses Association Act, family members of a mentally ill person, persons employed as domestics who do not hold themselves out to be psychiatric nurses, and registered nursing assistants are exempted under the Act.

Registration with the Psychiatric Nurses Association of Alberta is voluntary. To maintain active membership, an individual must have practiced psychiatric nursing at least one full year (or 200 actual days of work, which can be accumulated over a five-year period) in the preceding five years.

The P.N.A.A. is responsible for regulating the conduct of its members. The Advisory Committee to the Psychiatric Nursing Training Act has the power to cancel the certification of a psychiatric nurse if warranted. The Committee is also responsible for setting the educational qualifications required for certification as a psychiatric nurse.

In 1986, the discipline of psychiatric nursing was designated for regulation under the Health Disciplines Act. Regulations are being drafted by the Association. Once they are proclaimed, the Psychiatric Nursing Training Act and the Psychiatric Nurses Association Act will be repealed. The Advisory Committee to the Psychiatric Nursing Training Act will cease to exist and the functions of registration and discipline will be transferred to the Psychiatric Nurses Association.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	56,592	1: 4,353
2 (Lethbridge)	24	115,739	1: 4,822
3 (Pincher Creek)	20	35,970	1: 1,799
4 (Hanna)	2	12,376	1: 6,188
5 (Drumheller)	2	38,805	1:19,403
6 (Calgary excluding CMA)	11	98,279	1: 8,934
7 (Stettler)	2	40,681	1:20,341
8 (Red Deer)	232	116,611	1: 503
9 (Rocky Mountain House)	1	15,999	1:15,999
10 (Camrose)	29	79,745	1: 2,750
11 (Edmonton excluding CMA)	17	22,039	1: 1,296
12 (Bonnyville)	1	43,907	1:43,907
13 (Whitecourt)	4	54,973	1:13,743
14 (Hinton)	4	25,309	1: 6,327
15 (Banff)	0	22,794	-
16 (Fort McMurray)	4	48,779	1:12,195
17 (High Level)	3	48,852	1:16,284
18 (Grande Cache)	5	13,587	1: 2,717
19 (Grande Prairie)	19	72,997	1: 3,842
Census Metropolitan Area of Calgary	166	671,326	1: 4,044
Census Metropolitan Area of Edmonton	472	785,465	1: 1,664
PROVINCIAL TOTAL	1,031	2,375,278	1: 2,304

[1] Source: Psychiatric Nurses Association of Alberta (P.N.A.A.). Number of psychiatric nurses registered with the (P.N.A.A.) and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF PSYCHIATRIC NURSES, ALBERTA 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	166	671,326	1: 4,044
Census Metropolitan Area of Edmonton	472	785,465	1: 1,664
Between 10,000 and 60,000			
Camrose	17	12,968	1: 763
Fort McMurray	4	34,949	1: 8,737
Grande Prairie	10	26,471	1: 2,347
Lethbridge	16	58,841	1: 3,678
Lloydminster	0	10,201	-
Medicine Hat	8	41,804	1: 5,226
Red Deer	48	54,425	1: 1,134
Wetaskiwin	2	10,071	1: 5,036
Between 5,000 and 10,000			
Bonnyville	1	5,470	1: 5,470
Brooks	0	9,464	-
Crownest Pass	0	6,912	-
Drumheller	2	6,366	1: 3,183
Edson	2	7,323	1: 3,662
High River	0	5,096	-
Hinton	1	8,629	1: 8,629
Innisfail	4	5,535	1: 1,384
Lacombe	14	6,080	1: 434
Okotoks	0	5,214	-
Peace River	4	6,288	1: 1,572
Ponoka	157	5,473	1: 35
Rocky Mountain House	1	5,182	1: 5,182
Slave Lake	1	5,429	1: 5,429
St. Paul	0	5,030	-
Stettler	0	5,147	-
Taber	1	6,382	1: 6,382
Vegreville	0	5,276	-
Whitecourt	0	5,737	-
Under 5,000	100	552,724	1: 5,527
TOTAL	1,031	2,375,278	1: 2,304

[1] Psychiatric Nurses Association of Alberta (P.N.A.A.) Number of psychiatric nurses registered with the P.N.A.A. and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered or Practicing Personnel	612[1]	645[2]	1,031[3]
% Change in Number of Registered or Practicing Personnel	N/A[4]	N/A[4]	N/A[5]
Population (Alberta)	2,362,400[6]	2,372,000[6]	2,375,278[7]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 3,860	1: 3,678	1: 2,304

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: Because one of the major employers reported psychiatric nurses as registered nurses - psychiatric, the 1984 survey underreported the number of psychiatric nurses.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: Psychiatric Nurses Association of Alberta (P.N.A.A.). Number of psychiatric nurses registered with the P.N.A.A. and residing in Alberta as of December 31, 1986. Since the source of information for 1986 is different from the source of previous years, the data for 1986 and previous years is not comparable.

[4] Since the 1984 survey underreported the number of psychiatric nurses, the 1984 figure and the 1985 figure are not comparable.

[5] Source: Since the 1986 figure is from the Psychiatric Nurses Association of Alberta, it are not comparable with 1985 data.

[6] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[7] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both Alberta Hospital, Edmonton and Alberta Hospital, Ponoka offer a two-year hospital-based psychiatric nursing diploma program. Before they are eligible for certification, students must pass the provincial examinations which are administered by the Department of Educational Psychology, University of Alberta. The two programs together produced 56 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1983-84	1984-85	1985-86
Alberta Hospital - Edmonton (Program Length: 2 years)			
Enrolments:			
1st Year	48	42	42
2nd Year	34	32	31
Graduates:	33	29	30
Alberta Hospital - Ponoka (Program Length: 2 years)			
Enrolments[2]:			
1st Year	34	38	37
2nd Year	35	27	26
Graduates:	35	27	26
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	68	56	56

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[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] Additional students were accepted into the second year in 1983-84. One transfer student was accepted into the second year in 1984-85.

b) Continuing Education Programs:

A refresher program in psychiatric nursing was offered at the Alberta Hospital in Edmonton in 1986.

PSYCHOLOGISTS

I. OVERVIEW

Definition: A psychologist collects, interprets and applies scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Studies human behaviour and mental processes and investigates and recommends or provides treatment of psychological problems. Plans and carries out experiments using human beings and animal subjects, observes behaviour, and measures mental and physical characteristics. Analyzes effects of hereditary, and environmental factors on individual thought and behaviour. Undertakes diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,097 certified psychologists who resided in Alberta and registered with the Psychologists Association of Alberta (P.A.A.) in 1986.[1] Not all certified psychologists practice in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 798 psychologists employed in health care and social service agencies and institutions in Alberta in 1986.[2]

Psychologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 85 percent of the total. The provincial certified psychologist-to-population ratio was 1: 2,165 in 1986.

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1986. Excludes associate and student numbers.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Psychologists Association of Alberta
Suite 900, Sunlife Place
10123 - 99 Street
Edmonton, Alberta
T5J 3H1

b) Professional Association:

Psychologists Association of Alberta
Suite 400, Sunlife Place
10123 - 99 Street
Edmonton, Alberta
T5J 3H1

President: Dr. R. Van Mastrigt

c) Legislation:

Under the authority of the Psychologists Act, all individuals who used the title "Certified Psychologist" had to register with the Psychologists Association of Alberta (P.A.A.). However, practice was not restricted to registered members. In March, 1987, the Psychologist Act was replaced by the Psychology Profession Act. Under the new act, the titles "Psychologist" and "Chartered Psychologist" alone or in combination with other words are reserved for registered members. Non registered members may still practice if this restriction is observed.

In addition to registration, the P.A.A., is now responsible for practice review and for maintaining professional discipline. The Psychology Profession Act and Regulation set the basic educational qualifications required for registration as a psychologist. The Universitites Coordinating Council has the authority to approve academic programs and determine equivalences for registration as a certified psychologist.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,592	1: 9,432
2 (Lethbridge)	29	115,739	1: 3,991
3 (Pincher Creek)	5	35,970	1: 7,194
4 (Hanna)	0	12,376	1: -
5 (Drumheller)	3	38,805	1: 12,935
6 (Calgary-excluding CMA)	10	98,279	1: 9,828
7 (Stettler)	1	40,681	1: 40,681
8 (Red Deer)	55	116,611	1: 2,120
9 (Rocky Mountain House)	0	15,599	-
10 (Camrose)	1	79,745	1: 79,745
11 (Edmonton-excluding CMA)	6	22,039	1: 3,673
12 (Bonnyville)	4	43,907	1: 10,977
13 (Whitecourt)	14	54,973	1: 3,927
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	3	22,794	1: 7,598
16 (Fort McMurray)	10	48,779	1: 4,878
17 (High Level)	5	48,852	1: 9,770
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	11	72,997	1: 6,636
Census Metropolitan Area of Calgary	447	671,326	1: 1,502
Census Metropolitan Area of Edmonton	484	785,465	1: 1,623
PROVINCIAL TOTAL	1,097	2,375,278	1: 2,165

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[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1986. Excludes associate and student members.

[2] Source: Statistices Canada, Census, June 1986.

TABLE 1B

COMMUNITY BREAKDOWN OF PSYCHOLOGISTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	447	671,326	1: 1,502
Census Metropolitan Area Of Edmonton	484	785,465	1: 1,623
Between 10,000 and 60,000			
Camrose	0	12,968	-
Fort McMurray	6	34,949	1: 5,825
Grande Prairie	7	26,471	1: 3,782
Lethbridge	25	58,841	1: 2,354
Lloydminster	0	10,201	-
Medicine Hat	6	41,804	1: 6,967
Red Deer	43	54,425	1: 1,266
Wetaskiwin	2	10,071	1: 5,036
Between 5,000 and 10,000			
Bonnyville	2	5,470	1: 2,735
Brooks	1	9,464	1: 9,464
Crowsnest Pass	0	6,912	-
Drumheller	1	6,366	1: 6,366
Edson	0	7,323	-
High River	0	5,096	-
Hinton	1	8,629	1: 8,629
Innisfail	1	5,535	1: 5,535
Lacombe	0	6,080	-
Okotoks	5	5,214	1: 1.043
Peace River	3	6,288	1: 2,096
Ponoka	8	5,473	1: 684
Rocky Mountain House	0	5,182	-
Slave Lake	0	5,429	-
St. Paul	0	5,030	-
Stettler	1	5,147	1: 5,147
Taber	1	6,382	1: 6,382
Vegreville	0	5,276	-
Whitecourt	3	5,737	1: 1,912
Under 5,000	50	552,724	1:11,054
TOTAL	1,097	2,375,278	1: 2,165

---

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1986. Excludes associate and student members.

[2] Source: Statistics Canada, Census, June 1986.

III. PERSONNEL DATA

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel	1,298[1]	1,125[2]	1,097[3]
% Change in Number of Registered Personnel	N/A[4]	N/A[4]	-2.5%
Population (Alberta)	2,362,400[5]	2,372,000[5]	2,375,278[6]
% Change in Population	.03%	.04%	.01%
Personnel-to-Population Ratios:			
- Alberta	-	2,108	1: 2,165

[1] Source: Psychologists Association of Alberta. Note: Since a membership directory was not published by the Psychologists Association of Alberta in 1984, it was not possible to distinguish between certified and non-certified (e.g., student and associate) members. The number of registered personnel for 1984 includes both certified and non-certified psychologists.

[2] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1985. Excludes associate and student members.

[3] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1986. Excludes associates and student members.

[4] The 1984 figure and 1985 figure are not comparable because while the former includes both certified and non-certified psychologists, the latter includes only certified psychologists.

[5] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are six master's degree programs in psychology in Alberta: Master's of Science at the University of Calgary, Master's of Arts and Master's of Science at the University of Alberta, Master's of Education in Educational Psychology at the University of Alberta and the University of Calgary, and Master's of Science in Educational Psychology at the University of Calgary. These programs produced 90 graduates in 1985-86.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 30 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. MASTER'S PROGRAMS			
University of Alberta Master of Arts in Psychology (Program Length: variable)			
Enrolments:			
1st Year	5	6	5
2nd Year	1	4	3
3rd Year[2]	–	–	3
Graduates:	4	2	4
University of Alberta Master's of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	2	4	2
2nd Year	3	1	6
3rd Year[2]	2	3	4
Graduates:	3	2	5

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
University of Alberta Master of Education in Educational Psychology (Program Length: 4 years)			
Enrolments:			
1st Year	68	60	61
2nd Year[3]	105	140	126
Graduates:	44	18	34
University of Calgary Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	9	9	15
2nd Year	12	12	9
3rd Year[2]	14	14	13
Graduates:	6	6	10
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	32	19	22
2nd Year[3]	37	40	51
Graduates:	11	11	22
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	20	10	10
2nd Year[2]	43	56	38
Graduates:[5]	16	15	15
PROVINCIAL TOTAL:			
Number of Master's Programs: 6			
Graduates:	82	54	90

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
B. DOCTORAL PROGRAMS			
University of Alberta Ph.D. In Psychology (Program Length: variable)			
Enrolments:			
1st Year	8	2	-
2nd Year	2	2	3
3rd Year[2]	10	8	10
Graduates:	5	2	3
University of Alberta Ph.D. in Educational Psychology (Program Length: 6 years)[6]			
Enrolment:			
1st Year	33	36	20
2nd Year[3]	75	77	93
Graduates:	10	13	19
University of Calgary Ph.D. in Psychology (Program Length: 6 years)[6]			
Enrolments:			
1st year	3	3	2
2nd Year	-	2	4
3rd Year[2]	13	11	7
Graduates:	3	5	2
University of Calgary Ph.D. in Educational Psychology (Program Length: 6 years)			
Enrolments:			
1st Year	13	10	4
2nd Year[3]	26	37	35
Graduates:	9	4	6
PROVINCIAL TOTAL			
Number of Ph.D. Programs: 4			
Graduates:	27	24	30

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] Third year refers to students enrolled in third and later years of the program.

[3] Second year refers to students enrolled in second and later years of the program.

[4] There is a one year residency requirement to the program.

[5] The graduate figures refer to those students who convocated in a given year and do not include students only recommended to pass.

[6] Ph.D. programs require a two-year residency, though the norm for completion is 3 to 4 years.

b) Continuing Education Programs:

The Psychologists Association of Alberta, in addition to other agencies and organizations, offered a number of workshops and conferences for psychologists throughout 1986.

PUBLIC HEALTH INSPECTORS

I. OVERVIEW

Definition: Enforces laws and regulations governing health standards and provides advice, performing any combination of the following duties: Locates persons suspected of exposure to communicable diseases to prevent further spread of disease. Interviews exposed persons to secure information concerning other persons who may have been exposed. Advises people to obtain treatment. Inspects restaurants, hotels, cafeterias and other public places to ensure compliance with sanitation laws. Takes samples of water, food and air, and orders chemical, physical or biological tests to determine contamination. Visits plants where food, drugs, cosmetics and similar items are manufactured to investigate sanitary conditions and health and hygiene habits of persons handling consumer products. Destroys subgrades or prohibits sale of impure, toxic, damaged or misbranded items. Ascertains that required permits have been obtained and are displayed. Inspects nursing homes and hospitals to ensure conformance with standards and laws governing sanitation, facilities, ethical practices, maintenance of records and competence of personnel. Recommends changes in administrative procedures, facilities and standards to improve efficiency and service to patients. Applies regulations governing manufacture, labelling and sale of upholstered and stuffed articles to ensure use of approved materials. Inspects waste disposal sites to ensure that pollution control regulations are followed. Inspects water wells to enforce provisions of permits. Writes reports and issues violation notices and corrective orders.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

There were 129 public health inspectors practicing in Alberta in 1986.[1] Public health inspectors employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 47 percent of the total. The provincial public health inspector-to-population ratio was 1:18,413 in 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Ottawa-Carleton Regional Health Unit
P.O. Box 5367, Station "S"
Ottawa, Ontario
K2C 3J1

Board Chairman: Mr. Phillip Barton, C.P.H.I.(C)

b) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
9104 - 150 Avenue
Edmonton, Alberta
T2E 6M4

President: Mr. W.G. Chrapko

c) Legislation:

Public health inspectors in Alberta are regulated under the Public Health Act. Under the legislation, all individuals who wish to practice as public health inspectors for a local board of health established under the Public Health Act or Health Unit Act must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC BREAKDOWN OF PRACTICING PUBLIC HEALTH INSPECTORS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	56,592	1:14,148
2 (Lethbridge)	8	115,739	1:14,467
3 (Pincher Creek)	2	35,970	1:17,985
4 (Hanna)	2	12,376	1: 6,188
5 (Drumheller)	3	38,805	1:12,935
6 (Calgary excluding CMA)	2	98,279	1:49,140
7 (Stettler)	3	40,681	1:13,560
8 (Red Deer)	6	116,611	1:19,435
9 (Rocky Mountain House)	1	15,999	1:15,999
10 (Camrose)	4	79,745	1:19,936
11 (Edmonton Excluding CMA)	7	22,039	1: 3,148
12 (Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	4	54,973	1:13,743
14 (Hinton)	3	25,309	1: 8,436
15 (Banff)	4	22,794	1: 5,699
16 (Fort McMurray)	3	48,779	1:16,260
17 (High Level)	4	48,852	1:12,213
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	7	72,997	1:10,428
Census Metropolitan Area of Calgary	28	671,326	1:23,976
Census Metropolitan Area of Edmonton	32	785,465	1:24,546
PROVINCIAL TOTAL	129	2,375,278	1:18,413

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1984, 1985 AND 1986

	1984	1985	1986
Number of Registered or Practising Personnel	136[1]	131[2]	129[3]
% Change in Number of Registered or Practising Personnel	0.8%	-3.8%	-1.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	1.5%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1:17,371	1:18,107	1:18,413

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for public health inspectors in Alberta. The British Columbia Institute of Technology in Vancouver, the Ryerson Polytechnical Institute in Toronto, and College Regional Bourghemin in St. Hyacinthe, Quebec offer two-year diploma programs in public health inspection. In addition, Ryerson Polytechnical Institute offers a four-year baccalaureate degree program in environmental health. Most of the public health inspectors working in Alberta were trained in these post-secondary educational institutions. Athabasca University offers correspondence courses in public health through its environmental health program.

b) Continuing Education Programs:

An annual educational conference was held by the Canadian Institute of Public Health Inspectors. Various continuing education courses and in-service meetings related to public health were also offered.

RECREATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan, organize and direct programs of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for recreational therapists, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 207 recreational therapists practicing in Alberta in 1986.[1] Recreational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 65 percent of the total. The provincial recreational therapist-to-population ratio was 1:11,475 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

None.

c) Legislation:

There is no legislation regulating recreational therapists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC DISTRIBUTION OF PRACTICING RECREATIONAL THERAPISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	56,592	1:11,318
2 (Lethbridge)	9	115,739	1:12,860
3 (Pincher Creek)	4	35,970	1: 8,993
4 (Hanna)	2	12,376	1: 6,188
5 (Drumheller)	7	38,805	1: 5,544
6 (Calgary-excluding CMA)	2	98,279	1:49,140
7 (Stettler)	4	40,681	1:10,170
8 (Red Deer)	18	116,611	1: 6,478
9 (Rocky Mountain House)	0	15,999	-
10 (Camrose)	4	79,745	1:19,936
11 (Edmonton-excluding CMA)	4	22,039	1: 5,510
12 (Bonnyville)	2	43,907	1:21,954
13 (Whitecourt)	4	54,973	1:13,743
14 (Hinton)	0	25,309	-
15 (Banff)	1	22,794	1:22,794
16 (Fort McMurray)	1	48,779	1:48,779
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	6	72,997	1:12,166
Census Metropolitan Area of Calgary	68	671,326	1: 9,872
Census Metropolitan Area of Edmonton	66	785,465	1:11,901
PROVINCIAL TOTAL	207	2,375,278	1:11,475

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	172[1]	206[2]	207[3]
% Change in Number of Practicing Personnel	14.7%	19.8%	0.5%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:13,735	1:11,515	1:11,475

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers a two-year diploma in recreation therapy. The program produced 22 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAM FOR RECREATIONAL THERAPISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	31	35	31
2nd Year	14	16	22
Graduates:	19[2]	9	22

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] The number of graduates exceeds the number of second year enrolments because all part-time students are included in first year enrolments.

b) Continuing Education Programs:

There were no continuing education programs for recreational therapists in Alberta in 1985.

REGISTERED NURSES

I. OVERVIEW

Definition: Provides total nursing care for patients in hospitals, nursing homes, extended-care facilities and other establishments: Discusses and plans total nursing care of assigned patients with physician and other members of health team. Directs activities of nursing team or performs nursing activities to provide nursing care of patients. Administers prescribed medications and treatments. Observes, records and reports symptoms and changes in patients' condition. Makes nursing rounds and accompanies physician on medical rounds to evaluate needs of individual patients and to assess effectiveness of nursing care. Counsels patient and family in health care and treatment to be continued at home. Directs or carries out established procedures to prepare essential facilities and equipment, and assists physician in examiniations, treatments, surgery and deliveries. Performs nursing activities in obstetrics, paediatrics, orthopaedics and other clinical specializations.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 21,596 nurses who resided in Alberta and registered with the Alberta Association of Registered Nurses (A.A.R.N.) in 1986.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, 15,498 registered nurses were employed as of March 31, 1986.[2] The number of practicing registered nurses by specialty is shown in the table on page 251. Registered nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of the total. The number of nurses registered in Alberta increased by 7.3 percent between 1984 and 1986, while the provincial population grew by 0.5 percent during the same period. The registered nurse-to-population ratio was 1:110 in 1986.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1986. Excludes inactive, honorary, associate, and retired members.

[2] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Association of Registered Nurses
11620 - 168 Street
Edmonton, Alberta
T5M 4A6

Executive Director: Ms. Yvonne Chapman

President: Ms. Betty Gourlay

b) Professional Association:

United Nurses of Alberta
760, 10303 Jasper Avenue
Edmonton, Alberta
T5J 3N6

President: Ms. Margaret Ethier

c) Legislation:

On January 1, 1984, the Nursing Profession Act replaced the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires all nurses practicing in Alberta to be registered under the Act. Individuals who wish to use the title of "Registered Nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the Alberta Association of Registered Nurses the authority to enter registered nurses and certified graduate nurses into the appropriate registers, and to grant special permits and temporary permits to others who wish to practice under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the

Universities Coordinating Council. In addition, regulations specify individuals must have completed 1125 hours or more of satisfactory nursing practice in the five years preceding registration. If this requirement is not met, a refresher course must be completed.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSES, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	441	56,592	1:128
2 (Lethbridge)	998	115,739	1:116
3 (Pincher Creek)	246	35,970	1:146
4 (Hanna)	85	12,376	1:146
5 (Drumheller)	237	38,805	1:164
6 (Calgary excluding CMA)	279	98,279	1:352
7 (Stettler)	267	40,681	1:152
8 (Red Deer)	1,171	116,611	1:100
9 (Rocky Mountain House)	86	15,999	1:186
10 (Camrose)	558	79,745	1:143
11 (Edmonton excluding CMA)	737	22,039	1: 30
12 (Bonnyville)	278	43,907	1:158
13 (Whitecourt)	308	54,973	1:178
14 (Hinton)	99	25,309	1:256
15 (Banff)	175	22,794	1:130
16 (Fort McMurray)	365	48,779	1:134
17 (High Level)	190	48,852	1:257
18 (Grande Cache)	58	13,587	1:234
19 (Grande Prairie)	541	72,997	1:135
Census Metropolitan Area of Calgary	6,302	671,326	1:107
Census Metropolitan Area of Edmonton	7,297	785,465	1:108
Regional Location Unknown	878	-	-
PROVINCIAL TOTAL	21,596	2,375,278	1: 110

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1986. Excludes inactive, honorary, associate, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF REGISTERED NURSES, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	6,302	671,326	1: 107
Census Metropolitan Area of Edmonton	7,297	785,465	1: 108
Between 10,000 and 60,000			
Camrose	128	12,968	1: 101
Fort McMurray	295	34,949	1: 118
Grande Prairie	257	26,471	1: 103
Lethbridge	671	58,841	1: 88
Lloydminster	47	10,201	1: 217
Medicine Hat	387	41,804	1: 108
Red Deer	690	54,425	1: 35
Wetaskiwin	108	10,071	1: 93
Between 5,000 and 10,000			
Bonnyville	55	5,470	1: 99
Brooks	71	9,464	1: 133
Crowsnest Pass	43	6,912	1: 161
Drumheller	61	6,366	1: 104
Edson	45	7,323	1: 163
High River	78	5,096	1: 65
Hinton	34	8,629	1: 254
Innisfail	79	5,535	1: 70
Lacombe	84	6,080	1: 72
Okotoks	43	5,214	1: 121
Peace River	65	6,288	1: 97
Ponoka	141	5,473	1: 39
Rocky Mountain House	54	5,182	1: 96
Slave Lake	30	5,429	1: 181
St. Paul	54	5,030	1: 93
Stettler	55	5,147	1: 94
Taber	58	6,382	1: 110
Vegreville	70	5,276	1: 75
Whitecourt	32	5,737	1: 179
Under 5,000	2,631	552,724	1: 210
Regional Location Unknown	878	-	-
TOTAL	21,596	2,375,278	1: 110

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1986. Excludes inactive, honorary, associate, and retired members.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	20,124	20,843	21,596
% Change in Number of Registered Personnel	13.2%	3.6%	3.6%
Population (Alberta)	2,362,400[2]	2,372,000[2]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1: 117	1: 114	1: 110
- Western Canada[4]	1: 117	-	-

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1984, 1985, and 1986. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] The 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to nurses registered with their respective provincial professional associations.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1985-86, there were 14 basic education programs (11 diploma programs, two baccalaureate programs for registered nurses in Alberta, and one supplementary program in general nursing for registered psychiatric nurses) leading to registered nurse status. These programs produced a total of 813 graduates (701 from the diploma programs and 112 from the baccalaureate programs) in 1985-86. Table 3A lists the basic education programs, including the supplementary program.

The two baccalaureate nursing programs were offered at the University of Alberta and the University of Calgary. Seven of the 11 diploma programs were offered at community colleges. The remaining programs were hospital-based.

In addition, there were ten post-basic education programs for registered nurses in Alberta. Five of the programs led to certificates and another five led to degrees (three post-basic baccalaureate degree nursing for diploma nurses and two master's degree programs). These programs produced a total of 342 graduates in 1985-86. Table 3B lists the various post-basic education programs for registered nurses.

TABLE 3A BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. DIPLOMA NURSING PROGRAMS			
Grant MacEwan Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	88	92	93
2nd Year	73	45	45
Graduates:	65	47	38
Keyano College[2] (Program Length: 88 weeks)			
Enrolments:			
1st Year	24	34	34
Graduates:	-	13	18
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	60	52	44
2nd Year	22	44	34
Graduates:	11	20	27
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	148	123	126
2nd Year	75	95	95
Graduates:	65	80	72
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	81	78	80
2nd Year	77	70	78
Graduates:	67	71	65
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	84	102	102
2nd Year	54	55	59
Graduates:	38	55	49

TABLE 3A (cont'd)

	1983-84	1984-85	1985-86
Grande Prairie Regional College[3] (Program Length: 88 weeks)			
Enrolments:			
1st Year	26	25	28
2nd Year	16	22	20
Graduates	13	22	14
Royal Alexandra Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	126	130	123
2nd Year	92	95	121
3rd Year	68	80	85
Graduates:	68	80	87
Misericordia Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	90	90	90
2nd Year	63	77	74
3rd Year	57	55	70
Graduates:	56	51	67
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	150	152	150
2nd Year	120	121	122
3rd Year	98	106	117
Graduates:	98	104	104
University of Alberta Hospitals (Program Length: 2 1/3 years)			
Enrolments:			
1st Year	180	174	181
2nd Year	155	155	152
3rd Year	92	153	142
Graduates:	89	153	140
PROVINCIAL TOTAL			
Number of Diploma Programs: 11			
Graduates:	570	696	681

TABLE 3A (cont'd)

		1983-84	1984-85	1985-86
B.	SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
	Grant MacEwan Community College (Program Length: 13 months)			
	Enrolments:			
	1st Year	15	21	21
	Graduates:	9	10	20
	PROVINCIAL TOTAL			
	Total number of Diploma Nursing Programs: 12			
	Graduates:	579	706	701
C.	BACCALAUREATE NURSING PROGRAMS			
	University of Alberta (Program Length: 4 years)			
	Enrolments:			
	1st Year	104	107	92
	2nd Year	72	104	98
	3rd Year	47	69	94
	4th Year	43	46	60
	Graduates:	43	46	60
	University of Calgary (Program Length: 4 years)			
	Enrolments:			
	1st Year	66	64	64
	2nd Year	60	56	60
	3rd Year	51	58	50
	4th Year	40	52	52
	Graduates:	39	50	52
	PROVINCIAL TOTAL			
	Number of Baccalaureate Programs: 2			
	Graduates:	82	96	112

TABLE 3A (cont'd)

	1983-84	1984-85	1985-86
PROVINCIAL TOTAL			
Number of Basic Nursing Education Programs: 14			
Graduates:	661	802	813

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] This program commenced in 1983-84.

[3] This program commenced in 1982-83.

TABLE 3B POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. CERTIFICATE EDUCATION PROGRAMS			
Occupational Health Nursing			
Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:	33	43	45
1st year			
Graduates:	11	12	40
Advanced Practical Obstetric Nursing[2]			
University of Alberta (Program Length: 26 weeks)			
Enrolments:	10	-	-
1st year			
Graduates:	9	-	-
Nurse Practitioner[2]			
University of Alberta (Program Length: 5 months)			
Enrolments:	15	-	-
1st year			
Graduates:	11	-	-
Neonatal Intensive Care Nursing Education			
Foothills Hospital School of Nursing (Program Length: variable)			
Enrolments:	-	-	45
1st year			
Graduates:	-	-	38

TABLE 3B (cont'd)

	1983-84	1984-85	1985-86
Emergency Intensive Care Certificate[3]			
Misericordia Hospital School of Nursing (Program Length: 20 weeks)			
Enrolments: 1st year	-	-	36
Graduates:	-	-	33
Extended Care Nursing			
Grant MacEwan Community College (Program Length: 1 year)			
Enrolments: 1st year	243	215	25
Graduates:	24	26	30
Mental Health Nursing			
Mount Royal College (Program Length: 1 year)			
Enrolments: 1st year	39	46	41
Graduates:	15	5	7
PROVINCIAL TOTAL			
Number of Post-Basic Certificate Programs: 5			
Graduates:	70	43	148

TABLE 3B (cont'd)

	1982-83	1983-84	1984-85
B. DEGREE EDUCATION PROGRAMS			
Baccalaureate Nursing Program for Diploma Nurses			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	142	141	142
2nd Year	124	144	172
Graduates:	103	107	103
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	40	39	34
Graduates:	48	52	51
University of Lethbridge (Program Length: 2 years)			
Enrolments:			
1st Year	37	48	64
2nd Year	11	45	44
Graduates:	10	27	23
PROVINCIAL TOTAL			
Number of Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	161	186	177

TABLE 3B (cont'd)

	1983-84	1984-85	1985-86
C. GRADUATE DEGREE EDUCATION PROGRAMS			
Master's of Nursing			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	15	15	17
2nd Year	13	25	29
Graduates:	4	4	10
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	8	11	20
2nd Year	7	7	9
Graduates	6	6	7
PROVINCIAL TOTAL			
Number of Master's of Nursing Programs: 2			
Graduates:	10	10	17
PROVINCIAL TOTAL			
Number of Post-Basic Education Programs: 10			
Graduates:	241	239	342

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[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] This program is no longer being offered.

[3] This program commenced in 1985-86.

b) Continuing Education Programs:

Continuing education courses and programs for registered nurses were made available through a number of sources in Alberta.

In 1985-86, eleven institutions (Foothills Hospital, Grant MacEwan Community College, Misericordia Hospital, Lethbridge Community College, Red Deer College, Alberta Vocational Centre - Lac La Biche, Grande Prairie Regional College, Keyano College, Lakeland College, Olds College, and University of Alberta Hospitals) offered refresher courses in nursing for individuals returning to practice. In the 1985-86 acaemic year, 501 students were enrolled in these programs and 267 graduated.

The A.A.R.N. sponsors workshops, lectures, seminars, and programs in conjunction with its annual convention on a variety of nursing issues.

The University of Alberta, the University of Calgary, and a number of colleges offered continuing education programs of interest to nurses. Orientation programs, in-service programs, and other types of continuing education programs were offered by individual employing agencies. Programs varied in length and covered a wide range of topics.

TABLE 4

SPECIALTY BREAKDOWN OF REGISTERED NURSES, ALBERTA, 1986[1]

Specialty	Number of Practicing Nurses	Personnel-to-Population Ratio
Administrative	1,441	1: 1,648
Community/Public Health	727	1: 3,267
Emergency Room	500	1: 4,751
Home Care	430	1: 5,524
Intensive Care Units (C.C.U., I.C.U., Burn)	845	1: 2,811
Intravenous Therapy	34	1:69,861
Labor Delivery/Recovery Suite	315	1: 7,541
Long Term Care/Rehabilitation	1,678	1: 1,416
Maternal/Child	574	1: 4,138
Medical, Surgical	3,496	1: 679
Nursing Education	765	1: 3,105
Occupational/Staff Health	445	1: 5,338
Operating Room	603	1: 3,939
Out Patient Services	189	1:12,568
Paediatrics	631	1: 3,764
Physicians' Offices, Medical or School Clinics	461	1: 5,152
Psychiatric	686	1: 3,463
Recovery Room	136	1:17,465
Short Stay Unit	105	1:22,622
Specialty Total	14,061	1: 169
Others	1,437	1: 1,653
GRAND TOTAL	15,498	1: 153

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

* Note: The total number of personnel in this table is less than the total number of personnel in Tables 1A and 1B. This table shows the number of practicing personnel as of March 31, 1986, whereas Tables 1A and 1B show the number of nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1986.

REGISTERED NURSING ASSISTANTS

I. OVERVIEW

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In 1977 certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the Nursing Assistants Registration Act of 1976.

There were 7,864 nursing assistants who resided in Alberta and registered with the Nursing Assistants Registration Board in 1986.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 3,933 registered nursing assistants employed as of March 31, 1985.[2] Half of the registered nursing assistants were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of registered nursing assistants in Alberta increased by 4.9 percent between 1984 and 1986, while the provincial population grew by 0.5 percent during the same period. The registered nursing assistant-to-population ratio was 1:302 in 1986.

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1986.

[2] Source: "March 31, 1986 Survey of Employers of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Professional Council of Registered Nursing Assistants
10614 - 170 Street
Edmonton, Alberta
T5S 1P3

Executive Director/Registrar: Ms. Patricia Fredrickson

b) Professional Associations:

Alberta Association of Registerd Nursing Assistants
17410 - 107 Ave.
Edmonton, Alberta

President: Mrs. Roberta Metheral

Alberta Association of Registered Nursing Orderlies
9606 - 71 Avenue
Edmonton, Alberta
T6E 0W4

President: Mr. John Mimick

c) Legislation:

In November 1983, nursing assistants were designated to be regulated under the Health Disciplines Act. In September, 1984, the Minister Responsible for Professions and Occupations established a Nursing Assistants Committee to prepare regulations, for presentation to the Health Disciplines Board. These regulations came into force on January 1, 1987. At that time, the Nursing Assistants Registration Act was repealed and the Nursing Assistants Registration Board ceased to exist. Registration and discipline are now the responsibility of the Professional Council of Registered Nursing Assistants. The Health Disciplines Board is responsible for setting educational qualifications for registration purposes. Under the authority of the Health Disciplines Act, all individuals who wish to use the title of "Registered Nursing Assistant" or "Registered Nursing Orderly" must register with this Committee. Membership with the Alberta Association of Registered Nursing Assistants or the Alberta Association of Registered Nursing Orderlies is voluntary.

III. PERSONNEL DATA

TABLE 1A

GEOGRAPHIC BREAKDOWN OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	192	56,592	1:295
2 (Lethbridge)	385	115,739	1:301
3 (Pincher Creek)	164	35,970	1:219
4 (Hanna)	94	12,376	1:132
5 (Drumheller)	148	38,805	1:262
6 (Calgary-excluding CMA)	170	98,279	1:578
7 (Stettler)	243	40,681	1:167
8 (Red Deer)	391	116,611	1:298
9 (Rocky Mountain House)	59	15,999	1:271
10 (Camrose)	355	79,745	1:225
11 (Edmonton-excluding CMA)	436	22,039	1: 51
12 (Bonnyville)	190	43,907	1:231
13 (Whitecourt)	223	54,973	1:247
14 (Hinton)	48	25,309	1:171
15 (Banff)	96	22,794	1:237
16 (Fort McMurray)	69	48,779	1:707
17 (High Level)	136	48,852	1:359
18 (Grande Cache)	49	13,587	1:277
19 (Grande Prairie)	368	72,997	1:198
Census Metropolitan Area of Calgary	1,616	671,326	1:415
Census Metropolitan Area of Edmonton	2,354	785,465	1:334
Regional Area Unknown	78	-	-
PROVINCIAL TOTAL	7,864	2,375,278	1:302

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1986

Community by Population Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,616	671,326	1: 415
Census Metropolitan Area Of Edmonton	2,354	785,465	1: 337
Between 10,000 and 60,000			
Camrose	73	12,968	1: 178
Fort McMurray	32	34,949	1: 1,092
Grande Prairie	127	26,471	1: 208
Lethbridge	189	58,841	1: 311
Lloydminster	15	10,201	1: 680
Medicine Hat	146	41,804	1: 286
Red Deer	185	54,425	1: 294
Wetaskiwin	72	10,071	1: 140
Between 5,000 and 10,000			
Bonnyville	36	5,470	1: 152
Brooks	48	9,464	1: 197
Crowsnest Pass	47	6,912	1: 147
Drumheller	30	6,366	1: 212
Edson	23	7,323	1: 318
High River	36	5,096	1: 142
Hinton	13	8,629	1: 668
Innisfail	51	5,535	1: 109
Lacombe	21	6,080	1: 290
Okotoks	15	5,214	1: 348
Peace River	46	6,288	1: 137
Ponoka	43	5,473	1: 127
Rocky Mountain House	41	5,182	1: 126
Slave Lake	18	5,429	1: 302
St. Paul	42	5,030	1: 120
Stettler	48	5,147	1: 107
Taber	31	6,382	1: 206
Vegreville	33	5,276	1: 160
Whitecourt	19	5,737	1: 302
Under 5,000	2,336	552,724	1: 237
Regional Location Unknown	78	-	-
TOTAL	7,864	2,375,278	1: 302

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Registered Personnel[1]	7,497	7,643	7,864
% Change in Number of Registered Personnel	1.9%	1.9%	2.9%
Population (Alberta)	2,362,400[3]	2,372,000[3]	2,375,278[3]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios:			
- Alberta	1:315	1:310	1:302
- Western Canada[4]	1:366	-	-

[1] Source: Alberta Nursing Assistants Registration Board. Number of nursing assistants registered with the Board and residing in Alberta as of December 31, 1984, 1985, and 1986.

[2] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: Statistics Canada, Census, June 1986.

[4] The 1984 information is based on: (i) **Rollcall Update 84**. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) **Saskatchewan Health Manpower Report, 1982-84**. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to the 1979-79 academic year, the Alberta Vocational Centres in Edmonton and Calgary offered separate nursing aide and nursing orderly programs, which were 10 months in length. The curriculum content and administrative structure of the nursing aide and nursing orderly programs have been revised. Beginning in 1978-79, these programs were formally amalgamated under the new title of "Nursing Assistant Certificate Program."

In 1985 - 86, there were 282 graduates from the three training programs at the Alberta Vocational Centres in Calgary, Edmonton, and Grouard. The Calgary program includes outreach programs at Crowsnest Pass, Drumheller, and Claresholm.

TABLE 3 BASIC EDUCATION PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Alberta Vocational Centre - Calgary[2] (Program Length: 38 weeks)			
Enrolments	187	265	196
Graduates	97	151	122
Alberta Vocational Centre - Edmonton (Program Length: 38 weeks)			
Enrolments	182	225	202
Graduates	155	159	143
Alberta Vocational Centre - Grouard[3] (Program Length: 1 year)			
Enrolments	30	20	27
Graduates	24	14	17
PROVINCIAL TOTAL			
Number of Certificate Programs: 3			
Graduates	276	324	282

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] This program is brokered by the Chinook Educational Consortium.

[3] This program is brokered from Alberta Vocational Centre, Edmonton.

b) Continuing Education Programs:

The Professional Council of Registered Nursing Assistants and the Alberta Vocational Centres in Calgary and Edmonton continued to offer educational programs on relevant topics to members in 1986.

REHABILITATION PRACTITIONERS

I. OVERVIEW

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residential, family support, vocational, social education, recreation/ leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Rehabilitation Practitioners is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 1,223 rehabilitation practitioners practicing in Alberta in 1986.[1] Rehabilitation practitioners employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 46 percent of the total. Another 25 percent were found in Census Division 8 where Michener Centre, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,942 in 1986.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Rehabilitative Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 1K3

President: Ms. Linda McKay

c) Legislation:

In 1982 rehabilitation practitioners applied to the Health Occupations Board for designation under the Health Occupations Act. In November 1983 rehabilitation practitioners were designated as a health discipline under the Health Disciplines Act (formerly the Health Occupations Act). The Minister Responsible for Professions and Occupations established a Rehabilitation Practitioners Committee in November 1984. This committee is preparing draft regulations for presentation to the Health Disciplines Board (formerly the Health Occupations Board).

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC DISTRIBUTION OF PRACTICING REHABILITATION PRACTITIONERS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	39	56,592	1: 1,451
2 (Lethbridge)	61	115,739	1: 1,897
3 (Pincher Creek)	0	35,970	-
4 (Hanna)	1	12,376	1:12,376
5 (Drumheller)	1	38,805	1:38,805
6 (Calgary excluding CMA)	18	98,279	1: 5,460
7 (Stettler)	10	40,681	1: 4,068
8 (Red Deer)	305	116,611	1: 382
9 (Rocky Mountain House)	11	15,999	1: 1,454
10 (Camrose)	25	79,745	1: 3,190
11 (Edmonton excluding CMA)	61	22,039	1: 361
12 (Bonnyville)	42	43,907	1: 1,045
13 (Whitecourt)	13	54,973	1: 4,229
14 (Hinton)	0	25,309	-
15 (Banff)	5	22,794	1: 4,559
16 (Fort McMurray)	1	48,779	1:48,779
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	67	72,997	1: 1,090
Census Metropolitan Area of Calgary	213	671,326	1: 3,152
Census Metropolitan Area of Edmonton	350	785,465	1: 2,244
PROVINCIAL TOTAL	1,223	2,375,278	1: 1,942

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF PRACTICING REHABILITATION PRACTITIONERS, ALBERTA, 1986

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	213	671,326	1: 3,152
Census Metropolitan Area of Edmonton	392	785,465	1: 2,004
Between 10,000 and 60,000			
Camrose	10	12,968	1: 1,297
Fort McMurray	1	34,949	1: 34,949
Grande Prairie	65	26,471	1: 407
Lethbridge	61	58,841	1: 965
Lloydminster	10	10,201	1: 1,020
Medicine Hat	39	41,804	1: 1,072
Red Deer	290	54,425	1: 188
Wetaskiwin	19	10,071	1: 530
Between 5,000 and 10,000			
Bonnyville	12	5,470	1: 456
Brooks	0	9,464	-
Crownest Pass	5	6,912	1: 1,382
Drumheller	1	6,366	1: 6,366
Edson	0	7,323	-
High River	0	5,096	-
Hinton	0	8,629	-
Innisfail	7	5,535	1: 791
Lacombe	6	6,080	1: 1,013
Okotoks	0	5,214	-
Peace River	0	6,288	-
Ponoka	2	5,473	1: 2,737
Rocky Mountain House	11	5,182	1: 471
Slave Lake	0	5,429	-
St. Paul	30	5,030	1: 168
Stettler	0	5,147	-
Taber	0	6,382	-
Vegreville	5	5,276	1: 1,055
Whitecourt	0	5,737	-
Under 5,000	44	552,724	1: 12,562
TOTAL	1,223	2,375,278	1: 1,942

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	1,225[1]	1,212[2]	1,223[3]
% Change in Number of Practicing Personnel	-8.0%	-1.1%	0.9%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1:1,928	1:1,957	1:1,942

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[1] Source: "March, 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1984-85 Mount Royal College offered both a two-year diploma and a one-year certificate program in rehabilitation services. The certificate program was introduced in 1985-86. Grant MacEwan Community College, Lethbridge Community College, and Red Deer College offered the diploma programs. Alberta Vocational Centre, Lac La Biche offered a certificate program. The diploma programs produced 137 graduates and the certificate programs produced 16 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1983-84	1984-85	1985-86
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: diploma - 2 years)			
Enrolments:			
1st Year	183	220	147
2nd Year	33	52	50
Graduates:			
Diploma	28	40	48
Lethbridge Community College (Program Length: 1 year; diploma - 2 years)			
Enrolments:			
1st Year	32	25	28
2nd Year	18	21	21
Graduates:			
Diploma	14	15	16

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
Alberta Vocational Centre -Lac La Biche (Program Length: certificate- 36 weeks)			
Enrolments:			
1st Year	13	11	12
Graduates:			
Certificate	10	8	9
Mount Royal Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	74	76	72
2nd Year	23	47	48
Graduates:			
Certificate	3	4	-
Diploma	23	29	37
Red Deer College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	67	51	52
2nd Year	49	57	44
Graduates:			
Certificate[2]	59	-	-
Diploma	41	55	36
Medicine Hat College (Program Length: certificate - 1 year)			
Enrolments:[3]			
1st Year	-	-	30
Graduates:			
Certificate	-	-	7

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1984-85 Mount Royal College offered both a two-year diploma and a one-year certificate program in rehabilitation services. The certificate program was introduced in 1985-86. Grant MacEwan Community College, Lethbridge Community College, and Red Deer College offered the diploma programs. Alberta Vocational Centre, Lac La Biche offered a certificate program. The diploma programs produced 137 graduates and the certificate programs produced 16 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1983-84	1984-85	1985-86
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: diploma - 2 years)			
Enrolments:			
1st Year	183	220	147
2nd Year	33	52	50
Graduates:			
Diploma	28	40	48
Lethbridge Community College (Program Length: 1 year; diploma - 2 years)			
Enrolments:			
1st Year	32	25	28
2nd Year	18	21	21
Graduates:			
Diploma	14	15	16

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
Alberta Vocational Centre -Lac La Biche (Program Length: certificate- 36 weeks)			
Enrolments:			
1st Year	13	11	12
Graduates:			
Certificate	10	8	9
Mount Royal Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	74	76	72
2nd Year	23	47	48
Graduates:			
Certificate	3	4	-
Diploma	23	29	37
Red Deer College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	67	51	52
2nd Year	49	57	44
Graduates:			
Certificate[2]	59	-	-
Diploma	41	55	36
Medicine Hat College (Program Length: certificate - 1 year)			
Enrolments:[3]			
1st Year	-	-	30
Graduates:			
Certificate	-	-	7

TABLE 3 (cont'd)

	1983-84	1984-85	1985-86
PROVINCIAL TOTAL			
Number of Certificate Training Programs: 4			
Graduates:	72	12	16
Number of Diploma Training Programs: 4			
Graduates:	106	139	137

[1] Source: **Alberta Health and Social ServicesEducation Programs Inventory, 1985-86**. Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] The certificate program was offered for the last time in 1983-84.

[3] This program commenced on a temporary basis in 1985-86

b) Continuing Education Programs:

The Alberta Association of Rehabilitation Practitioners as well as a number of employers offered various workshops and seminars for rehabilitation practitioners in 1986.

RESPIRATORY THERAPISTS

I. OVERVIEW

Definition:	Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospitals personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system. (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa Ontario: Employment and Immigration Canada, 1980)

Although registration under the Health Disciplines Act is not mandatory to practice, individuals who wish to use the titles "Registered Respiratory Therapist" or "Registered Respiratory Technologist" must be registered.

As of 1986, respiratory therapists were registered with the Health Disciplines Board. In previous years the number of persons employed was used as the indicator of manpower supply. Since these sources provide different information, data from 1986 cannot be compared to previous years.

There were 397 respiratory therapists registered with the Respiratory Therapists Committee in 1986.[1] Respiratory therapists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 80 percent of the total. The provincial personnel-to-population ratio was 1: 5,983.

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[1] Source: Respiratory Therapists Committee.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Respiratory Therapists Committee
Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

b) Professional Association:

Alberta Society of Respiratory Therapists
907 - 18 Avenue, N.W.
Calgary, Alberta
T2M 0V6

President: Mr. Brian Bruell

c) Legislation:

The designation of the discipline of respiratory technologists under the Health Disciplines Act received royal assent in June 1983. A committee was established by the Minister Responsible for Professions and Occupations in December 1983 to prepare draft regulations for presentation to the Health Disciplines Board. In October 1985, regulations governing the discipline of respiratory technologist were approved under the Health Disciplines Act. The regulations came into effect March 31, 1986. In December, 1986 an amendment to the legislation changed the name of the discipline to respiratory therapists.

III. PERSONNEL DATA

TABLE 1 GEOGRAPHIC BREAKDOWN OF REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	56,592	1: 9,432
2 (Lethbridge)	18	115,739	1: 6,430
3 (Pincher Creek)	1	35,970	1: 35,970
4 (Hanna)	0	12,376	-
5 (Drumheller)	1	38,805	1: 38,805
6 (Calgary-excluding CMA)	2	98,279	1: 49,140
7 (Stettler)	0	40,681	-
8 (Red Deer)	15	116,611	1: 7,774
9 (Rocky Mountain House)	1	15,999	1: 15,999
10 (Camrose)	4	79,745	1: 19,936
11 (Edmonton-excluding CMA)	13	22,039	1: 1,695
12 (Bonnyville)	0	43,907	-
13 (Whitecourt)	4	54,973	1: 13,743
14 (Hinton)	0	25,309	-
15 (Banff)	2	22,794	1: 11,397
16 (Fort McMurray)	2	48,779	1: 24,390
17 (High Level)	0	48,852	-
18 (Grande Cache)	0	13,587	-
19 (Grande Prairie)	4	72,997	1: 18,249
Census Metropolitan Area of Calgary	142	671,326	1: 4,728
Census Metropolitan Area of Edmonton	175	785,465	1: 4,488
Regional Location Unkown	7	-	-
PROVINCIAL TOTAL	397	2,375,278	1: 5,983

---

[1] Source: Respiratory Therapists Committee.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RESPIRATORY THERAPISTS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing or Registered Personnel	298[1]	269[2]	397[3]
% Change in Number of Practicing or Registered Personnel	3.0%	-9.7%	N/A
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios - Alberta	1: 7,928	1: 8,818	1: 5,983

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Respiratory Therapists Committee. Since the source of information for the 1986 data is different form the souce of previous years, the data for 1986 and previous years are not comparable.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology each offer a two-year respiratory technology diploma program. There were 48 graduates from the two programs in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RESPIRATORY THERAPISTS IN ALBERTA[1]

	1983-84	1984-85	1985-86
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	40	45	43
2nd Year	32	30	32
Graduates:	27	29	30
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	28	29	28
2nd Year	29	25	28
Graduates:	26	24	18
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	53	53	48

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

b) Continuing Education Programs:

The Northern Alberta Institute of Technology offered a number of additional courses in the respiratory technology/therapy field. Some of the courses offered were held in conjunction with an affiliated training hospital for clinical components. The Alberta Society of Respiratory Therapists also offered some continuing education programs.

SOCIAL WORKERS

I. OVERVIEW

Definition: Counsels and aids individuals and families to understand and resolve their personal and social problems. Interviews clients with problems; such as, personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secures information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluates information obtained and assesses client's capacities. Determines type of assistance required, counsels client regarding plans for meeting needs, and assists client to mobilize his inner capacities and environmental sources to improve social functioning. Aids client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refers client to community agencies and other organizations and arranges for provision of appropriate assistance, such as, financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follows progress of client after immediate problems have been overcome, and compiles case records and prepares reports. May secure supplementary information, such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Social Workers (A.A.S.W.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1986 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of manpower information.

There were 2,154 social workers practicing in Alberta in 1986.[1] Social workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for two-thirds of the total. The provincial social worker-to-population ratio was 1:1,103 in 1986.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Licensing, Registration, or Certification Authority:

Alberta Association of Social Workers
#100, 11831 - 123 Street
Edmonton, Alberta
T5L 0G7

b) Professional Association:

Alberta Association of Social Workers
#100, 11831 - 123 Street
Edmonton, Alberta
T5L 0G7

President: Ms. Margaret Dewhurst

c) Legislation:

Under the authority of the Social Workers Act, all individuals who wish to use the title of "Registered Social Worker" must register with the Alberta Association of Social Workers (A.A.S.W.). However, registration is not mandatory in order to practice in the province. In addition to registration responsibilities, the association has the power to discipline its members. The Universities Coordinating Council evaluates academic qualifications of applicants and sets examinations for registration purposes.

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

III. PERSONNEL DATA

TABLE 1A GEOGRAPHIC BREAKDOWN OF PRACTICING SOCIAL WORKERS, ALBERTA, 1986

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	42	56,592	1:1,347
2 (Lethbridge)	109	115,739	1:1,062
3 (Pincher Creek)	14	35,970	1:2,569
4 (Hanna)	2	12,376	1:6,188
5 (Drumheller)	17	38,805	1:2,283
6 (Calgary excluding CMA)	15	98,279	1:6,552
7 (Stettler)	14	40,681	1:2,906
8 (Red Deer)	116	116,611	1:1,005
9 (Rocky Mountain House)	22	15,999	1: 727
10 (Camrose)	65	79,745	1:1,227
11 (Edmonton excluding CMA)	16	22,039	1:1,377
12 (Bonnyville)	47	43,907	1: 934
13 (Whitecourt)	40	54,973	1:1,374
14 (Hinton)	13	25,309	1:1,947
15 (Banff)	17	22,794	1:1,341
16 (Fort McMurray)	48	48,779	1:1,016
17 (High Level)	47	48,852	1:1,039
18 (Grande Cache)	3	13,587	1:4,529
19 (Grande Prairie)	71	72,997	1:1,028
Census Metropolitan Area of Calgary	685	671,326	1: 980
Census Metropolitan Area of Edmonton	751	785,465	1:1,046
PROVINCIAL TOTAL	2,154	2,375,278	1:1,103

[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 1B COMMUNITY BREAKDOWN OF SOCIAL WORKERS, ALBERTA, 1986

Community by Population Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	685	671,326	1: 980
Census Metropolitan Area of Edmonton	751	785,465	1: 1,046
Between 10,000 and 60,000			
Camrose	17	12,968	1: 763
Fort McMurray	28	34,949	1: 1,248
Grande Prairie	58	26,471	1: 456
Lethbridge	85	58,841	1: 692
Lloydminster	7	10,201	1: 1,457
Medicine Hat	42	41,804	1: 995
Red Deer	75	54,425	1: 726
Wetaskiwin	17	10,071	1: 592
Between 5,000 and 10,000			
Bonnyville	16	5,470	1: 342
Brooks	11	9,464	1: 860
Crownest Pass	8	6,912	1: 864
Drumheller	7	6,366	1: 909
Edson	8	7,323	1: 915
High River	3	5,096	1: 1,699
Hinton	5	8,629	1: 1,726
Innisfail	16	5,535	1: 346
Lacombe	5	6,080	1: 1,216
Okotoks	0	5,214	-
Peace River	13	6,288	1: 484
Ponoka	19	5,473	1: 288
Rocky Mountain House	22	5,182	1: 236
Slave Lake	21	5,429	1: 258
St. Paul	27	5,030	1: 186
Stettler	6	5,147	1: 858
Taber	12	6,382	1: 532
Vegreville	36	5,276	1: 147
Whitecourt	8	5,737	1: 717
Under 5,000	146	552,724	1: 3,786
TOTAL	2,154	2,375,278	1: 1,103

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[1] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[2] Source: Statistics Canada, Census, June 1986.

TABLE 2 SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1984, 1985, AND 1986

	1984	1985	1986
Number of Practicing Personnel	2,114[1]	2,290[2]	2,154[3]
% Change in Number of Practicing Personnel	-4.0%	8.3%	-5.9%
Population (Alberta)	2,362,400[4]	2,372,000[4]	2,375,278[5]
% Change in Population	0.3%	0.4%	0.1%
Personnel-to-Population Ratios: - Alberta	1: 1,118	1: 1,036	1: 1,103

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "March 31, 1985 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1985.

[3] Source: "March 31, 1986 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1986.

[4] Source: "Alberta Census Division Population Projections Update, 1984-1998." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Statistics Canada, Census, June 1986.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and an 18-month Master's of Social Work (M.S.W.) program. In 1985-86, the B.S.W. and M.S.W. programs produced 158 and 31 graduates respectively.

Satellite programs of the Faculty of Social Welfare, University of Calgary are located at the University of Alberta in Edmonton and at the University of Lethbridge. The Edmonton Division offers a full range of courses at the first professional degree (B.S.W.) level, whereas a partial range of B.S.W. courses is available in Lethbridge. Social work courses are also provided throughout the province and can be taken via tele-conferencing.

In addition there are diploma programs in social services available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. These programs produced a total of 1,947 graduates in 1985-86. There is also a community social service diploma offered by Alberta Vocational Centre, Lac La Biche. This program produced 33 graduates in 1985-86.

TABLE 3 BASIC EDUCATION PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1983-84	1984-85	1985-86
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Grant MacEwan Community College (Program Length: 2 years)			
Enrolments:[2]			
1st Year	98	129	140
2nd Year	73	78	95
Graduates:	47	41	63
Mount Royal College[2] (Program Length: 2 years)			
Enrolments:			
1st Year	198	137	122
2nd Year	8	67	63
Graduates:	53	58	60
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	25	25	40
2nd Year	22	24	24
Graduates:	20	22	24

Table 3 (Cont'd)

	1983-84	1984-85	1985-86
COMMUNITY SOCIAL SERVICE DIPLOMA			
Alberta Vocational Centre Lac La Biche Program Length: 2 years.			
Enrolments[4]			
First Year	21	15	36
Second Year	-	-	11
Graduates	14	11	33
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 4			
Graduates:	134	132	180
C. BACCALAUREATE PROGRAM			
University of Calgary Bachelor of Social Work (Program Length: 4 years)			
Enrolments:[6]			
1st Year	21	11	9
2nd Year	59	71	76
3rd Year	235	228	193
4th Year	121	161	154
Graduates:	139	149	158
D. MASTER'S PROGRAM			
University of Calgary Master's of Social Work (Program Length: 18 months)[7]			
Enrolments:			
1st Year	54	45	59
Graduates:	32	37	31

[1] Source: **Alberta Health and Social Service Education Programs Inventory, 1985-86.** Edmonton, Alberta: Department of Advanced Education, December 1986.

[2] The number of graduates may exceed second year enrolments due to the manner in which second year status was calculated and yearly graduate statistics were compiled.

[3] As of 1985, the curriculum was revised to incorporate a two-year diplolma program.

[4] As of 1985-86, enrolment data includes figures for the Slave Lake outreach program.

[5] This total includes 5 graduates who did not complete full requirements for certification.

[6] The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepency between the enrolment figures for the second year and the third year of the program.

[7] The M.S.W. program is one year in length following a B.S.W. degree. Students with an undergraduate degree other then a B.S.W. degree may be admitted to a two-year program.

b) Continuing Education Programs:

The Faculty of Social Welfare and the Faculty of Continuing Education of the University of Calgary provided continuing professional education in social work in various parts of the province to ensure that new approaches, research, and knowledge were made available to practicing social workers.

Continuing professional education programs were also offered by the Alberta Association of Social Workers in conjunction with its annual conference. Numerous other agencies offered educational programs to their members.